# BOTTOM TRAWL SURVEY OF CRAB AND GROUNDFISH: KODIAK ISLAND, CHIGNIK, AND EASTERN ALEUTIAN AREAS, 1995

By
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## TABLE OF CONTENTS

	Page
LIST OF TABLES	i
LIST OF FIGURES	ii
LIST OF APPENDICES	iii
ABSTRACT	1
INTRODUCTION	2
METHODS	3
Trawl Description and Procedures	3
King and Tanner Crab Population Estimation	4
RESULTS	4
Kodiak Populations	5
Chignik Populations	6
Eastern Aleutian Populations	7
Raja rhina and Bathyraja Length to Weight Relationships	7
Prevalence of Bitter Crab Syndrome	8
LITERATURE CITED	9
TABLES	11
FIGURES	23
APPENDIX	36

## LIST OF TABLES

<u> Fable</u>		<u>Page</u>
1.	Number of male king and Tanner crab by shell age and cohort captured during the Westward Region trawl survey, 1995	11
2.	Tanner crab population estimates from trawl surveys in the Kodiak area, 1987-1995	12
3.	Relative abundance by weight of the 20 most encountered species of groundfish and invertebrates captured from a trawl survey of Kodiak Island waters, 1995	14
4.	Tanner crab population estimates from trawl surveys in the Chignik Management Areas, 1989-1995	15
5.	Relative abundance by weight of the 20 most encountered species of groundfish and invertebrates captured from a trawl survey of the Chignik area, 1995	16
6.	Tanner crab population estimates from trawl surveys in the Eastern Aleutians Management Area, 1990-1995	17
7.	Rela Relative abundance by weight of the 20 most encountered species of groundfish and invertebrates captured from a trawl survey of the Eastern Aleutian area, 1995	19
8.	Length to weight conversion table for longnose skates, Raja rhina	20
9.	Length to weight conversion table for the skate Genus Bathyraja	21
10.	Results of bitter crab sampling in Alitak Bay, 1991-1995	22

# LIST OF FIGURES

Figu	<u>ire</u>	<u>P</u>
1.	Areas surveyed during the 1995 Westward Region trawl survey	
2.	Carapace width frequency of male and female Tanner crab captured during the 1995 Westward Region trawl survey	
3.	Stacked bar graphs of carapace width frequency by shell condition of the estimated population of male Tanner crab from the Northeast, Eastside, and Southeast Sections of Kodiak Island taken during the 1995 trawl survey	
4.	Stacked bar graphs of carapace width frequency by shell condition of the estimated population of male Tanner crab from the Southwest, Westside, and North Mainland Sections of Kodiak Island taken during the 1995 trawl survey	
5.	Percent ovigerity of king and Tanner crab captured during the Kodiak trawl survey, 1995	
6.	Kodiak male red king crab population by year, 1993-1995	
7.	Plotted catch of arrowtooth flounder, flathead sole, rock sole, and yellowfin sole from the 1995 Kodiak trawl survey	
8.	Catch of Pacific cod, sablefish, pollock, and rougheye rockfish in pounds per nautical mile from the 1995 Kodiak trawl survey	
9.	Stacked bar graphs of carapace width frequency by shell condition fo the estimated populations of male Tanner crab from the Chignik Bay, Kujulik, Mitrofania, and Ivanof Bay areas of the Chignik management District taken during the 1995 trawl survey	
10	Carapace width of male Tanner crab from the Chignik Management District taken by trawl survey, 1991-1995	
11	Percent ovigerity of Tanner crab captured during a trawl survey of the Chignik and Eastern Aleutians Management Areas, 1995	
12	. Catch of Pacific cod, sablefish, pollock, and rougheye rockfish in pounds per nautical mile from the 1995 Eastern Aleutians trawl survey	
13	. Catch of rock sole, yellowfin sole, and flathead sole, and arrowtooth flounder in pounds per nautical mile from the 1995 Eastern Aleutians trawl survey	

# LIST OF APPENDICES

Appen	<u>dix</u>	<u>Page</u>
A.	Explanation of terms and acronyms	37
B.	Fishing log and catch data from the Westward Region trawl survey, 1995	40
C.	Stations fished during the 1995 Westward Region trawl survey, divided by districts, sections, and stratum with areas in square kilometers and square nautical miles	60
D.1.	Station boundaries and names, and trawl haul numbers (bold) and locations (arrows), north Kodiak island and West Afognak Island, June and August, 1995	63
D.2.	Station boundaries and names, and trawl haul numbers (bold) and locations (arrows), off-shore Marmot Bay, chiniak Bay and Barnabas Gully, June and July, 1995	64
D.3.	Station boundaries and names, and trawl haul numbers (bold) and locations (arrows), Chiniak and Ugak, June and July, 1995	65
D.4.St	ation boundaries and names, and trawl haul numbers (bold) and locations (arrows), Kiliuda Bay and South Sitkalidak, June and July, 1995	66
D.5.	Station boundaries and names, and trawl haul numbers (bold) and locations (arrows), Alitak Bay area, July 1995	67
D.6.	Station boundaries and names, and trawl haul numbers (bold) and locations (arrows), south Kodiak Island offshore, June and July, 1995	68
D.7.	Station boundaries and names, and trawl haul numbers (bold) and locations (arrows), Uganik Bay and Uyak Bay, August 1995	69
D.8.	Station boundaries and names, and trawl haul numbers (bold) and locations (arrows), Shelikof Strait south of Cape Nukshak, August 1995	70
D.9.	Station boundaries and names, and trawl haul numbers (bold) and locations (arrows), Shelikof Strait north of Cape Nukshak, August 1995	71
D.10.	Station boundaries and names, and trawl haul numbers (bold) and locations (arrows), Chignik Bay, Kujulik Bay, and Castle Bay, August 1995	72
D.11.	Station boundaries and names, and trawl haul numbers (bold) and locations (arrows), Kuiukta Bay, Mitrofania Island area, and ivanof Bay, August 1995	73

# LIST OF APPENDICES (Cont.)

Appen	<u>dix</u> .	<u>Page</u>
D.12.	Station boundaries and names, and trawl haul numbers (bold) and locations (arrows), Unalaska and Beaver Inlet, August 1995	74
D.13.	Station boundaries and names, and trawl haul numbers (bold) and locations (arrows), western Unalaska Island and Cape Idak, Umnak Island, August 1995	75
D.14.	Station boundaries and names, and trawl haul numbers (bold) and locations (arrows), Akutan Bay and Akun Bay, July 1995	76
E.	Numbers of Tanner crab per 1.85 km (1 nautical mile) in 1995 in the Kodiak Management District with population index by section	77
F.	Numbers of king crab per 1.85 km (1 nautical mile) in 1995 in the Kodiak Management District with population index by section	82
G.1.	Arrowtooth lengths (cm) by area from a trawl survey of the Kodiak area, 1995	87
G.2.	Halibut lengths (cm) from a trawl survey of the Kodiak area, 1995	89
G.3.	Flathead sole lengths (cms) from a trawl survey of the Kodiak area, 1995	92
G.4.	English sole lengths (cms) from a trawl survey of the Kodiak area, 1995	93
G.5.	Dover sole lengths (cms) from a trawl survey of the Kodiak area, 1995	93
G.6.	Rex sole lengths (cms) from a trawl survey of the Kodiak area, 1995	94
G.7.	Yellowfin sole lengths (cms) from a trawl survey of the Kodiak area, 1995	94
G.8.	Butter sole lengths (cms) by area from a trawl survey of the Kodiak area, 1995	95
G.9.	Sablefish lengths (cms) by area from a trawl survey of the Kodiak area, 1995	95
G.10.	Pacific cod lengths (cms) by area from a trawl survey of the Kodiak area, 1995	96
G.11.	Pollock lengths (cms) by area from a trawl survey of the Kodiak area, 1995	97
G.12.	Rougheye rockfish lengths (cms) by area from a trawl survey of the Kodiak area, 1995	98

# LIST OF APPENDICES (Cont.)

Appen	$\underline{\text{dix}}$	Page
H.	Numbers of Tanner crab per 1.85 km (1 nautical mile) in 1995 in the Chignik Management District with population index by area	99
I.	Length frequencies of groundfish captured during the 1995 trawl survey of the Chignik area	100
J.	Numbers of Tanner crab per 1.85 km (1 nautical mile) in 1995 in the Eastern Aleutians District with population index by area	102
K.1.	Arrowtooth lengths (cms) by area from a trawl survey of the Eastern Aleutians area, 1995	104
K.2.	Halibut lengths (cms) by area from a trawl survey of the Eastern Aleutians area, 1995	105
K.3.	Pollock lengths (cms) by area from a trawl survey of the Eastern Aleutians area, 1995	106
K.4.	Rock sole lengths (cms) by area from a trawl survey of the Eastern Aleutians area, 1995	107
K.5.	Rex sole lengths (cms) by area from a trawl survey of the Eastern Aleutians area, 1995	107
K.6.	Pacific cod lengths (cms) by area from a trawl survey of the Eastern Aleutians area, 1995	108
K.7.	Flathead sole lengths (cms) by area from a trawl survey of the Eastern Aleutians area, 1995	109
K.8.	Lengths (cms) of English, Dover, yellowfin, and butter sole, rougheye, northern, black, and dusky rodkfish, Pacific ocean perch, sablefish, and herring from a trawl survey of the Eastern Aleutians, 1995	110

#### **ABSTRACT**

A trawl survey of Kodiak Island, and Alaska Peninsula areas was completed during June to August of 1995. A total of 400 tows were completed. Catch composition was determined and crabs and commercial groundfish were quantified. Red king crab *Paralithodes camtschaticus* and Tanner crab *Chionoecetes bairdi* stocks were found to be in a severely depressed state throughout the region with populations insufficient to support commercial fisheries. A survey of bitter crab syndrome in Alitak Bay found levels to 7.8%. A length to weight table for the skates of the Genus *Bathyraja* and for the longnose skate, *Raja rhina* were completed.

**KEY WORDS:** 

crab, groundfish, Paralithodes, Chionoecetes, Raja rhina, Bathyraja, trawl

survey, Kodiak, Alaska Peninsula, Chignik, bitter crab syndrome

#### INTRODUCTION

Bottom trawl surveys were conducted by the Alaska Department of Fish and Game (ADF&G) in 1995 which focused on inshore waters around Kodiak Island, along the Alaska Peninsula from Cape Douglas to Ivanof Bay, and in the Eastern Aleutian Islands from Akun Island to Umnak Island. As defined by Commercial shellfish regulations (ADF&G 1995), this includes the Kodiak, a portion of the Alaska Peninsula and the Dutch Harbor management areas for king crab *Paralithodes camtschaticus* and the Kodiak, Chignik, and Eastern Aleutian districts of the Westward management area for Tanner crab *Chionoecetes bairdi*. This report will use Tanner crab management units unless specifically talking about king crab.

Trawl surveys were conducted in the region as early as 1963. Early surveys targeted Long Island Bank (Reynolds 1964), Marmot Flats (McMullen 1967a), Portlock Bank (McMullen 1967b), Albatross Banks (McMullen 1968), Alitak and Kaguyak (Kingsbury 1971), and areas of Kodiak Island as well as Chignik and Pavlof Bays on the Alaska Peninsula (Colgate 1983). Because the trawling allows faster surveying and also captures smaller age classes of crabs, it has gradually replaced the crab pot as the preferred gear for crab stock assessment (Jackson 1990). The last pot survey was conducted in 1987. The 1990 trawl survey was the first to cover the Eastern Aleutians District.

The primary objective of the survey was to assess Tanner crab and red king crab populations. A secondary objective was to document the prevalence of bitter crab syndrome in the Tanner crab stocks in Alitak and Ivanof Bays and to examine the incidental catch of groundfish. Specific objectives for the groundfish portion of the survey were to (1) determine species composition of the catch by haul and area, (2) obtain length frequency distributions for commercially important groundfish by area and (3) develop a skate length to weight table for skates of the Genus *Bathyraja* and for the longnose skate, *Raja rhina*. An explanation of special technical terms and abbreviations used in this report is presented in Appendix A.

In addition to these objectives, the survey accommodated several special requests. Amy Hirons of the University of Alaska-Fairbanks requested samples of pollock, Pacific cod, capelin, sandlance, herring, myctophids, and squid for use in stable isotope analyses studying the trophic interaction between seals and sea lions and their prey. Dr. Christine Ribic of the University of Wisconsin-Madison requested data on marine debris caught in the survey for comparison with types of debris caught in other areas of the United States. Forest Blau of ADF&G Kodiak requested duplicate tows in certain areas of Chiniak Bay in order to increase the accuracy of the king crab population estimates. These stations had been sampled with larval crab collectors five years previously and these larva should begin to become available to the trawl survey.

#### **METHODS**

### Trawl Description and Procedures

The 27.4-m ADF&G research vessel *Resolution* was used to make in areas of known king and Tanner crab habitat. One tow was made at each station, except for several stations in Chiniak Bay: CHA and CHB were sampled three times, CHE and CHK were sampled twice.

A 400-mesh eastern otter trawl net was used. This net had a 21.3-m (70-ft) long headrope with 18 floats that were 3.1 cm (8 in) in diameter. The footrope was 29.0 m (95 ft) long and lacked roller gear or tickler chain. The footrope was weighted with a 1-cm (3/8-in) chain attached every 25.4 cm (10 in) to ensure that the footrope tended bottom. The two dandylines were 45.7 m (25 fathoms) long, and each consisted of an 18.3-m (10-fathom) section of 1.5-cm (5/8-in) cable and a pair of 27.4-m (15-fathom) sections of 1.3-cm (1/2-in) cable, one attached to the top and the other to the bottom of each net wing. The Astoria "V" type doors weighed 340 kg (750 lb) each and measured 1.5 m x 2.1 m (5 ft x 7 ft). The net was constructed with 10.2-cm (4-in) stretch mesh at the mouth, 8.9-cm (3.5-in) stretch mesh in the body, and the cod end consisted of a 3.2-cm (1.25-in) stretch mesh liner. The net was designed to sweep a 12.2-m (40-ft) path.

The offshore survey areas were divided into stations approximately 9.2 km square and each inshore or bay area was divided into stations 4.6 km square. Because of land boundaries, considerable variation occurred in the size of some offshore and most bay stations. The trawl was towed on the bottom at a speed of approximately 3.7 km per hour (2 knots) for 1.85 km at each station. This distance, the equivalent of one nautical mile, captured a suitable sample weight in most areas. The length of the tow was determined from GPS readings; corrections were estimated by the skipper for tows that were not straight. Irregular bottom type occasionally caused haul lengths to differ from 1.85 km. Catches from these tows were standardized to 1.85 km. Tow distances and related information are recorded in Appendix B. Trawl placement within stations was determined by bottom contours and the location of trawlable bottom. All tows were made during daylight hours. The stations surveyed in 1995 with their areas in km² listed by stratum, section, and district are given in Appendix C. A data logger from Brancker and Associates was used to record temperatures. The logger was attached to the headrope of the net so bottom temperatures recorded were approximately 2 meters above the bottom.

Catches were brought aboard and total weight of the catch was determined by weighing the cod end of the trawl using an electronic crane scale accurate to the nearest 5 pounds. For some important commercial species, the entire haul was sampled. These species include sablefish *Anoplopoma fimbria*, Pacific cod *Gadus macrocephalus*, halibut *Hippoglossus stenolepis*, all rockfish *Sebastes* and *Sebastolobus*, lingcod *Ophiodon elongatus*, salmon, weathervane scallops *Patinopecten caurinus*, skates, Dungeness crab *Cancer magister*, Tanner crab, and king crab. One 35 kg capacity basket was used to obtain a subsample of the other species in the catch. The entire subsample was sorted, counted, and weighed. Spiny dogfish *Squalus acanthias* and giant wrymouth *Delolepis gigantea* which are not likely to be taken in a basket sample were whole haul sampled. Commercial finfish species taken in the subsample and whole haul sample and also Tanner crabs and king crabs were measured to provide a size frequency distribution for each species. Finfish were measured from snout to the fork or mid-point of the caudal fin. Reproductive

success of mature Tanner and king crabs was measured by examining for the presence of egg clutches and estimating the percent fullness to the closest 10%. Crab exhibiting signs of the bitter crab syndrome (BCS) were noted.

Hemolymph smears from thirty randomly selected Tanner crabs were prepared from each haul in Alitak Bay on the south end of Kodiak Island. This area had previously been identified as an area of high prevalence of bitter crab syndrome (Pearson 1992). The smears were stained with a Baxter Dif-Quik stain and read under protocols established by the State Pathology Laboratory in Juneau. Thirty fields were examined under 100 power for each slide and rated either positive on a scale of 1 to 4 or negative.

Lengths and weights were taken from all longnose skates,  $Raja\ Rhina$  and Aleutian and Alaskan skates,  $Bathyraja\ aleutica$  and  $B.\ parmifera$ , as time permitted. Lengths were taken from the tip of the nose along the dorsal surface to the anterior notch of the pectoral fin. The model used for weight as a function of length was the equation  $W = a\ L^b$  where W = weight, L = length, and a and b are parameters. The parameters a and b were estimated using an iterative procedure. The squared difference between calculated weight and observed weight were summed for all fish. This was iterated using different values independently of the parameters a and b to minimize the summed deviation (Neilsen and Johnson 1983). Individual weight-length pairs which had weights less than 80% or greater than 120% of the calculated weights were discarded and the iterative procedure was repeated to obtain final estimates of a and b.

### King and Tanner Crab Population Estimation

Population estimates for king and Tanner crabs were derived from the trawl survey data using the area swept technique (Alverson 1969). Assuming that the trawl swept a path 12.2 m wide, the area swept by the trawl in a 1-km tow was 1/82.0 km<sup>2</sup>. Hence, the catch per tow was converted into a density estimate, number per kilometer squared by multiplying the number caught per kilometer by 82.0. The calculated density was then multiplied by the area of the station being considered to give an estimate of that station's population size. In stations where more than one tow was completed, the number caught per kilometer was calculated by combining the total catch in all hauls in the station and dividing by the total distance towed in those hauls. Population estimates were computed for desired subsets of geographic or biological variables by summing the estimates from the individual stations.

#### RESULTS

Areas fished are shown in Figure 1 and Appendix B details the exact position, depth, date, bottom temperature, catch and other information recorded for each tow.

### **Kodiak Populations**

The Northeast, Eastside, Southeast, and Southwest Sections of the Kodiak Island District were surveyed from June 19 to July 14 with 157 tows completed (numbers 1-157, 151 stations). The Westside and North Mainland Sections were surveyed from August 20 to 29, and 61 tows were completed (numbers 227-287). The locations of the Kodiak Island tows are shown in Appendices D.1-D.9. The calculated area used in the Kodiak crab population estimates totaled 9,847.4 km<sup>2</sup>.

The 1995 survey captured a total of 9,521 male and 8,070 female Tanner crabs having mean widths of 74.1 mm and 57.8 mm, respectively (Figure 2). Tanner crabs were captured in 88% of all tows, their catch numbers ranging from 1 to 1748 crabs. New-shell crabs accounted for 89% of the total male Tanner crabs captured on the Kodiak survey (Table 1).

Population estimates for Tanner crabs (Appendix E) were derived for most of the commercial fishing sections described in the ADF&G commercial shellfish regulations. Appendix E also gives the catch of each size-sex category per 1.85 km towed by station. The estimated population and the shell condition of male Tanner crabs in the Kodiak fishing sections is shown in figures 3 and 4. Each crab measured was weighted by a factor of the tow length, net width, and station size to obtain the data for these graphs.

The portion of the Kodiak District Tanner population included in the survey area was estimated to be 35.4 million animals, up from the estimate of 19.3 million in 1994 (Urban 1996, Table 2). Most of the increase came in the Northeast District which increased from 3.5 to 16.6 million crabs. The average size of the crabs was small, 57.9 mm, representing a large recruitment event which is still several years from legal size.

The population of legal Tanner crabs in the Kodiak District was estimated to be 680,000, the lowest estimate since the survey began in 1987, down 40% from the 1994 level and only 14% of 1989 population. Due to low abundance of legal crabs, the Kodiak Management District did not open to commercial fishing as scheduled on January 15, 1996.

Egg clutches of 1,561 mature female Tanner crabs from the Kodiak area were examined; nearly 36% exhibited clutch fullness (percent oviparity) of 100% (Figure 5).

Forty three males and 40 female red king crabs were captured. Males had a mean length of 144.8 mm and females 131.6 mm. The majority were mature. King crabs were captured in 11% of the tows with catches ranging from 1 animal per tow to a high of 18 king crabs in Alitak Bay.

The Kodiak red king crab population remains at historically low population levels, and the commercial fishing season for this species has remained closed since 1983 (Figure 6). The Kodiak red king crab population was estimated to be only 27,492 animals. Population estimates were derived for the main commercial fishing districts by size and sex categories (Appendix F). Fecundity, as measured by clutch fullness, is shown in Figure 5. Fifty-five percent of the adult female king crabs sampled had an oviparity of 80% or greater.

The average haul weight of fish and invertebrates from all Kodiak hauls was 572 kg/kilometer. Species composition from each Kodiak area haul is presented in Appendix B. Arrowtooth flounder

Atheresthes stomias was the most abundant species encountered (30.7%), followed by flathead sole *Hippoglossoides elassodon* (19.1%) and pollock *Theragra chalcogramma* (18.5%). The rank and relative abundance by weight of the 20 most common species encountered in the Kodiak survey are listed in Table 3.

Length measurements of more than 13,000 fish from 24 species were taken during the Kodiak Island bottom trawl survey. Length frequency data has been combined by bays within the Kodiak area (Appendix G). The catch of selected groundfish are plotted by haul in Figures 7 and 8.

### Chignik Populations

The area south of the Alaska Peninsula covering the Chignik Tanner crab management area was surveyed from August 9 through August 12 with 31 hauls being completed, numbers 196 to 226. The calculated area used in the crab population estimates was 901.9 km<sup>2</sup> (Appendix C). Appendices D.10-D.11 show the specific locations, haul numbers and trawl stations in the sampled areas.

The 1995 Chignik bottom trawl survey captured 1,296 Tanner crabs. New-shelled animals accounted for 92% of the male Tanner crabs captured (Table 1). The mean width of Tanner crabs was 89.7 mm for males and 31.0 mm for females (Figure 2). Size frequency and shell condition of the estimated male Tanner crab populations by fishing area is shown in Figure 9. The number of Tanner crabs captured in a single tow ranged from 1 to 179 animals.

Population estimates were derived for each size-sex category of crabs by fishing area (Appendix H). Chignik Tanner crab populations have continued to decline since 1990 when the population was estimated at 8.8 million animals. The 1995 Tanner crab population was estimated to be 1.6 million animals (Table 4, Figure 10). The commercial Tanner crab fishery did not open in the Chignik District during the 1996 season because of low legal crab abundance and high anticipated effort.

Egg clutches of 80% fullness or greater were found in 76.2% of 156 adult female Tanner crabs captured in the Chignik District (Figure 11).

The red king crab population in the Alaska Peninsula remains at historic low levels: No red king crab were captured during the Chignik trawl survey. As has been the case in Kodiak, the last commercial fishery was the 81/82 season.

Species composition of each Chignik haul is presented in Appendix B. Flathead sole, *Hippoglossoides elassodon* was the most abundant species encountered (31.9%), followed by arrowtooth flounder, *Atheresthes stomias* (24.2%), and pollock *Theragra chalcogramma* (19.8%). The rank and relative abundance by weight of the 20 most common species encountered in the Chignik survey are listed in Table 5.

Length frequencies were derived from 2,400 measurements of 15 groundfish species found in the Chignik area (Appendix I).

#### Eastern Aleutian Populations

Thirty-eight tows were completed in the Eastern Aleutian District between July 30 and August 5. Tow numbers were 158 to 195. The area considered in the crab population estimates totaled 858.7 km<sup>2</sup>. Appendices D.12-D.14 show the specific location and haul numbers of trawl stations in the sampled areas.

The bottom trawl survey captured 1,686 Tanner crabs, 897 males and 789 females with a mean width of 69.2 mm and 51.2 mm respectively (Figure 2). The number of Tanner crabs captured in a single tow ranged from 1 to 700 animals. The estimated number of Tanner crabs in the Eastern Aleutians district was 2.1 million animals (Appendix J), roughly double the 1994 estimate (Table 6). This increase is largely accounted for by an increase in the Beaver Inlet population which increased from 240,000 to 1.3 million animals. As in the recruitment event in Marmot flats, these are small crabs, with an average size of 44.8mm.

The legal Tanner crabs population was estimated to be 29,000 crabs with Makushin Bay having the largest legal Tanner crab population with 11,500 animals (Appendix J). This legal population is well below historic levels and the 1996 fishery did not open. Of 137 adult female Tanner examined, 64% had egg clutches of 80% or greater (Figure 11).

The red king crab population in the Dutch Harbor area also continued at historically low levels, with the last commercial fishery being 81/82 season. The 1995 bottom trawl survey captured only two king crabs, a very old shell legal male at 181 mm carapace length and a sublegal, old shell male at 124 mm carapace length. Anecdotal accounts of divers in Unalaska Bay report substancial numbers of king crabs, and several areas where king crab were captured on a 1985 king crab pot survey can not be trawled: Captain's Bay, the Anderson Bay portion of Makushin Bay, and Final Bay of Beaver Inlet.

Species composition of each haul is presented in Appendix B. Arrowtooth flounder *Atheresthes stomias* was the most abundant species encountered (36.2%), followed by pollock *Theragra chalcogramma* (21.8%) and flathead sole *Hippoglossoides elassodon* (11.8%). The rank and relative abundance by weight of the 20 most common species encountered in the Eastern Aleutians are listed in Table 7. The catch of selected groundfish are plotted by haul in Figures 12 and 13.

Length frequencies were derived from 2,900 measurements of 22 groundfish species found in the Eastern Aleutian area (Appendices K.1-K.8).

### Raja rhina and Bathyraja Length to Weight Relationships

One hundred and thirty-one longnose skates, *Raja rhina* were measured, ranging in size from 9.2 to 78 cms. Two hundred and thirty-nine skates of the Genus Bathyraja were measured, ranging from 10.4 to 88 cms. Based on these measurements, tables were developed for the observed length to weight relationships. The equation for the longnose skate was found to be  $(7.153 \times 10^{-5}) \times L^{2.85}$  (Table 8). The relationship for the Genus *Bathyraja* is  $(6.45 \times 10^{-5}) \times L^{2.94}$  (Table 9).

### Prevalence of Bitter Crab Syndrome

Blood smears were sampled from 329 Tanner crabs in Alitak Bay. Table 10 summarizes the results of this testing for 1991 to 1995. In Alitak Bay, the 1995 BCS prevalence of 7.8% was up from 5.6% of the previous year, roughly back to the level of 7.9% in 1993, but down from the 18.1% of 1992.

In the sampled crabs, 11 of 11 crabs judged to be suspect of bitter crab syndrome by visual inspection had blood smears containing the bitter crab dinoflagellate. This indicates trained observers can be very accurate in identifying crab with gross external symptoms of the disease. Conversely, 54.2% of the crab whose blood smears contained BCS cells showed no external symptoms of the disease.

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Table 1. Number of male king and Tanner crab by shell age and cohort captured during the Westward Region trawl survey, 1995.

		Shell Condition						
Cohort	Definition	Soft shell	New shell	Old Shell	Very Old			
Kodiak king crab				•				
Prerecruit IV	<79 mm	0	2	0	0			
Prerecruit III	79-95 mm	0	2	0	0			
Prerecruit III	96-115 mm	0	0	0	0			
Prerecruit I		0	6	0	0			
Recruit	>116 mm and sublegal	0	7	0	0			
	<152 mm and legal newshell	0	5	-	-			
Postrecruit	>151 mm or legal and not newshell	0	19	2	2			
Kodiak Tanner crab								
Prerecruit IV	<70 mm	171	5229	3	1			
Prerecruit III	70-91 mm	26	1385	20	3			
Prerecruit II	92-114 mm	14	884	97	72			
Prerecruit I	>114 mm and sublegal	9	412	235	237			
Recruit	<165 mm and legal newshell	ĺ	305	-	-			
Postrecruit	>164 mm or legal and not newshell	0	34	238	145			
Chignik Tanner crab								
Prerecruit IV	<70 mm	19	392	0	0			
Prerecruit III	70-91 mm	1	19	Ö	1			
Prerecruit II	92-114 mm	0	67	8	5			
Prerecruit I	>114 mm and sublegal	0	146	23	8			
Recruit	<165 mm and legal newshell	0	91	-	-			
Postrecruit	>164 mm or legal and not newshell	0	1	5	10			
E. Aleutian Tanner crab								
Prerecruit IV	<70 mm	24	803	0	0			
Prerecruit III	70-91 mm	1	76	4	2			
Prerecruit II	92-114 mm	0	63	32	9			
Prerecruit I	>114 mm and sublegal	0	42	79	37			
Recruit	<165 mm and legal	0	9	-	-			
Postrecruit	newshell >164 mm or legal and not newshell	0	0	14	4			

Table 2. Tanner crab population estimates from trawl surveys in the Kodiak area, 1987-1994.

Fishing		Females		No.	Sublegal Mal	es by size (m	m)	Recruits	Postre	cruit	Total	Total	Total
Section	Juvenile	Adult	Total	<70	70-91	92-114	>114	_	<165 mm	>164 mm	Legal	Males	Crab
Northeast													-
1987	461,089	1,135,422	1,596,511	352,860	248,415	326,506	493,916	101,484	197,865	33,038	332,387	1,754,084	3,350,595
1988	2,643,594	674,490	3,318,084	2,495,836	395,350	545,140	685,327	384,565	23,104	20,977	428,647	4,550,299	7,868,383
1989	5,481,792	5,654,266	11,136,058	5,127,986	1,546,105	2,165,369	2,319,049	1,409,193	133,905	269,859	1,812,957	12,971,466	24,107,524
1990	1,812,656	3,140,834	4,953,490	1,446,757	1,482,180	1,142,711	1,024,535	510,407	93,031	101,879	705,317	5,801,500	10,754,990
1991	4,385,849	2,055,075	6,440,924	3,651,597	1,501,747	1,330,396	1,080,017	424,636	25,367	52,117	502,121	8,065,877	14,506,801
1992	2,013,074	1,365,357	3,378,431	1,586,874	1,225,453	929,682	793,749	209,337	15,516	7,070	231,922	4,767,681	8,146,112
1993	2,273,819	1,116,830	3,390,649	2,224,926	435,614	581,625	637,663	263,095	31,759	16,787	311,640	4,191,469	7,582,118
1994	602,256	1,227,010	1,829,266	627,897	170,908	255,845	455,371	102,589	98,082	2,401	203,072	1,713,093	3,542,359
1995	6,481,040	1,423,393	7,904,433	6,459,818	1,453,343	326,713	372,625	10,279	132,191	0	142,470	8,754,969	16,659,402
Eastside													
1987	5,476,413	3,930,451	9,406,864	5,750,053	609,468	514,257	1,202,144	149,925	299,091	89,925	538,941	8,614,863	18,021,727
1988	2,083,954	820,032	2,903,986	1,616,718	443,776	627,028	732,705	298,165	100,786	1,914	400,865	3,821,092	6,725,078
1989	2,393,419	3,821,312	6,214,731	2,029,181	1,567,590	1,640,007	1,285,700	799,441	270,769	29,333	1,099,543	7,622,021	13,836,752
1990	1,547,033	10,045,389	11,592,422	1,299,698	679,016	2,019,193	4,059,072	788,369	162,670	60,418	1,011,457	9,068,436	20,660,858
1991	1,490,845	3,677,868	5,168,713	1,207,670	289,090	655,547	2,669,044	3,016,121	494,482	38,622	3,549,225	8,370,576	13,539,289
1992	1,292,574	1,963,566	3,256,140	1,612,556	328,625	472,486	1,584,166	460,988	280,962	64,984	806,934	4,804,767	8,060,907
1993	1,723,641	1,504,592	3,228,233	1,362,714	252,485	406,367	1,003,469	108,462	382,993	18,760	510,215	3,535,250	6,763,483
1994	1,768,539	571,130	2,339,669	1,311,715	706,286	465,077	572,892	28,420	141,209	2,837	172,466	3,228,436	5,568,105
1995	3,796,916	505,420	4,302,336	3,326,873	594,529	456,566	411,403	24,858	87,815	2,394	115,067	4,904,438	9,206,774
Southeast													
1987	2,379,119	894,205	3,273,324	2,044,847	413,335	337,537	875,142	480,004	88,816	2,841	571,661	4,242,522	7,515,846
1988	243,200	314,486	557,686	188,394	221,880	607,570	1,185,633	777,880	129,593	50,773	958,246	3,161,723	3,719,409
1989	922,092	424,847	1,346,939	694,841	140,444	246,215	564,215	175,593	70.553	9,739	255,885	1,901,600	3,248,539
1990	1,148,017	781,102	1,929,119	1,086,357	131,469	299,245	651,302	383,859	117,252	5,970	507,081	2,675,454	4,604,573
1991	4,650,523	919,633	5,570,156	4,448,179	425,927	270,594	367,736	173,532	37,162	7,382	218,076	5,730,512	11,300,668
1992	2,156,307	1,322,229	3,478,536	1,648,095	688,608	443,849	587,767	33,246	139,404	10,076	182,726	3,551,045	7,029,581
1993	3,893,506	563,806	4,457,312	3,625,310	248,343	430,013	403,299	27,357	111,011	8,453	146,821	4,853,786	9,311,098
1994	112,692	222,890	335,582	88,247	28,663	87,918	474,048	108,208	54,865	4,252	167,325	846,201	1,181,783
1995	2,728,372	110,416	2,838,788	2,425,953	15,058	28,566	82,912	76,922	47,721	2,370	127,013	2,679,502	5,518,290
Southwest													
1987	2,368,774	590,671	2,959,445	1,990,338	45,752	727,616	1,799,111	638,664	107,127	44,416	790,207	5,353,024	8,312,469
1988	191,219	225,135	416,354	168,051	16,405	63,339	591,313	1,370,943	61,725	76,170	1,508,838	2,347,946	2,764,300
1989	2,716,302	220,553	2,936,855	2,510,149	202,807	189,372	443,446	281,673	118,617	85,688	485,978	3,831,752	6,768,607
1990	3,527,315	1,383,437	4,910,752	2,635,176	1,259,988	709,183	704,467	53,127	59,552	11,567	124,246	5,433,060	10,343,812
1991	1,248,463	262,105	1,510,568	1,020,587	219,284	403,480	553,335	97,159	33,952	3,185	134,296	2,330,982	3,841,550
1992	461,617	212,484	674,101	455,293	153,648	320,046	236,226	296,449	58,330	5,803	360,582	1,525,795	2,199,896
		•	•	•	•	•	, -		, -	, -	,	, ,	

Table 2. (Page 2 of 2).

Fishing		Females			. Sublegal Mal			Recruits	Postre		Total	Total	Tota
Section	Juvenile	Adult	Total	<70	70-91	92-114	>114		<165 mm	>164 mm	Legal	Males	Crat
Southwest (	cont.)												
1993	6,656,829	244,881	6,901,710	6,173,566	505,031	182,384	392,985	251,151	69,760	13,352	334,263	7,588,229	14,489,939
1994	205,702	120,561	326,263	131,884	70,630	60,597	145,516	129,013	23,087	7,429	159,529	568,156	894,419
1995	151,984	91,201	243,185	137,702	57,628	109,653	124,067	33,631	48,012	0	81,643	510,693	753,878
Westside													
1987	2,541,394	1,526,443	4,067,837	1,243,848	2,401,608	1,149,549	1,302,877	835,177	46,421	50,537	932,135	7,030,017	11,097,854
1988	3,232,321	1,125,086	4,357,407	2,903,179	160,149	477,223	606,182	243,134	45,969	21,869	310,972	4,457,705	8,815,112
1989	8,655,122	1,185,882	9,841,004	7,125,499	1,387,997	651,689	739,127	373,683	71,456	32,282	477,421	10,381,733	20,222,737
1990	1,539,037	4,037,828	5,576,865	725,246	1,325,090	807,624	874,879	209,757	98,770	42,662	351,189	4,084,028	9,660,893
1991	188,063	564,038	752,101	130,079	138,641	480,619	440,221	35,631	22,320	4,335	62,286	1,251,846	2,003,947
1992	168,907	419,822	588,729	129,031	171,209	214,118	299,796	114,508	46,032	5,615	166,155	980,309	1,569,038
1993	397,675	587,678	985,353	266,121	161,469	153,721	292,347	56,918	114,132	8,001	179,051	1,052,709	2,038,062
1994	159,998	248,767	408,765	108,531	113,242	74,755	90,262	31,733	42,415	0	74,148	460,938	869,703
1995	169,581	419,442	589,023	108,716	165,389	162,040	136,931	15,092	89,628	2,203	106,923	679,999	1,269,022
North Mainla	ınd												
1987	668,509	2,267,682	2,936,191	622,331	926,344	2,693,481	2,761,800	498,657	101,469	39,646	639,772	7,643,728	10,579,919
1988	3,055,286	861,060	3,916,346	2,592,371	131,758	424,485	1,227,352	922,762	82,755	32,415	1,037,932	5,413,898	9,330,244
1989	4,557,775	1,263,559	5,821,334	4,670,560	251,950	289,575	1,150,687	417,410	105,261	165,459	688,130	7,050,902	12,872,236
1990	7,046,141	3,301,573	10,347,714	5,970,049	2,313,040	806,067	1,470,971	148,847	115,216	36,289	300,352	10,860,479	21,208,193
1991	760,801	1,128,212	1,889,013	605,036	606,408	537,513	948,691	61,666	121,712	4,747	188,125	2,885,773	4,774,786
1992	2,379,002	898,078	3,277,080	2,279,142	224,065	392,813	753,649	108,416	70,078	14,613	193,107	3,842,776	7,119,856
1993	3,812,333	1,022,423	4,834,756	3,215,642	150,137	418,016	820,819	157,189	146,364	36,468	340,021	4,944,635	9,779,391
1994	3,023,459	536,322	3,559,781	2,228,789	554,325	232,786	360,218	143,776	116,170	58,652	318,598	3,694,716	7,254,497
1995	626,581	246,765	873,346	676,801	133,803	61,118	151,268	38,078	49,671	18,653	106,402	1,129,392	2,002,738
South Mainla	ınd												
1987	11,393	64,558	75,951	37,975	11,393	37,975	3,798	0	0	0	0	91,141	167,092
GRAND TOTA	AL.							3					
1987	13,906,688	10,409,430	24,316,118	12,042,252	4,656,314	5,786,921	8,438,786	2,703,910	840,789	260,402	3,805,101	34,729,374	59,045,492
1988	11,449,574	4,020,290	15,469,864	9,964,549	1,369,319	2,744,783	5,028,512	3,997,449	443,932	204,119	4,645,500	23,752,663	39,222,527
1989	24,726,502	12,570,419	37,296,921	22,158,216	5,096,893	5,182,227	6,502,224	3,456,993	770,561	592,360	4,819,914	43,759,474	81,056,395
1990	16,620,199	22,690,162	39,310,361	13,163,283	7,190,782	5,784,022	8,785,225	2,094,366	646,492	258,785	2,999,643	37,922,955	77,233,316
1991	12,724,544	8,606,932	21,331,476	11,063,149	3,181,096	3,678,149	6,059,042	3,808,745	734,995	110,388	4,654,128	28,635,564	49,967,040
1992	8,671,479	6,181,536	14,853,015	7,710,991	2,791,607	2,772,995	4,255,353	1,222,944	1,220,642	108,160	2,551,746	20,082,692	34,935,707
1993	18,757,803	5,040,209	23,798,012	16,868,279	1,753,109	2,172,126	3,550,581	864,271	856,019	101,822	1,822,112	26,166,207	49,964,219
1994	5,876,645	2,929,680	8,806,325	4,497,063	1,634,055	1,176,978	2,098,307	543,740	475,828	75,571	1,095,139	10,501,542	19,307,867
1995	13,954,474	2,796,636	16,751,110	13,135,863	2,419,749	1,144,656	1,279,207	198,861	455,038	25,620	679,519	18,658,994	35,410,104
1990	13,934,474	2,790,036	10,751,110	13,135,003	2,418,749	1,144,030	1,219,207	190,001	400,008	25,620		10,000,994	30,4

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Table 3. Relative abundance by weight of the 20 most encountered species of groundfish and invertebrates captured from a trawl survey of Kodiak Island waters, 1995.

Rank	Common Name	Species Name	% of catch by weight
		<b>A</b>	00 =0/
1	Arrowtooth flounder	Atheresthes stomias	30.7%
2	Flathead sole	Hippoglossoides elassodon	19.1%
3	Pollock	Theragra chalcogramma	18.5%
4	Yellowfin sole	Pleuronectes aspera	4.3%
5	Pacific cod	Gadus macrocephalus	3.5%
6	Halibut	Hippoglossus stenolepis	3.4%
7	Starfish	Subclass: Asteroidea	3.1%
8	Butter sole	Isopsetta isolepis	2.3%
9	Big skate	Raja binoculata	2.0%
10	Rock sole	Lepidopsetta bilineata	1.4%
11	Dover sole	Microstomus pacificus	1.4%
12	Tanner crab	Chionoecetes bairdi	1.3%
13	Sculpin, unid.	Family: Cottidae	1.0%
14	Rex sole	Glyptocephalus zachirus	0.9%
15	Starry flounder	Platichthys stellatus	0.9%
16	Sea anemone, unid.	Order: Actinaria	0.8%
17	Longnose skate	Raja rhina	0.8%
18	Alaska plaice	Pleuronectes quadrituberculatus	0.7%
19	Alaska/Aleutian skate	Bathyraja spp.	0.7%
20	Hermit crab, unid.	Family: Paguridae	0.3%
	all others	, ,	2.7%

Table 4. Tanner crab population estimates from trawl surveys in the Chignik Management Areas, 1989-1995.

Fishing		Females	•	No.	Sublegal Ma	les by size (r	nm)	Recruits	Postre	ecruit	Total	Total	Total
Section	Juvenile	Adult	Total	<70	70-91	92-114	>114		<165 mm		Legal	Males	Crab
CHIGNIK	DISTRICT												
lvanof													
1989	502,222	266,214	768,436	451,363	139,929	782,548	739,638	336,765	12,413	12,413	361,591	2,475,069	3,243,505
1990	883,810	32,971	916,781	1,040,228	14,699	108,905		108,961	0	0	108,961	1,523,534	2,440,315
1991	360,136	1,476	361,612	349,152	0	0	1,723	7,136	0	738	7,874	358,749	720,361
1992	32,735	2,215	34,950	37,240	1,969	984	5,028	4,119	1,282	738	6,139	51,360	86,310
1993	54,793	1,625	56,418	27,817	41,776	9,880	2,751	0	395	0	395	82,619	139,037
1994	44,186	12,094	56,280	13,569	22,612	12,866	3,832	984	246	0	1,230	54,109	110,389
1995	60,450	3,832	64,282	72,813	2,848	492	2,461	2,707	492	0	3,199	81,813	146,095
Mitrofania	1												
1989	193,422	510,311	703,733	201,538	155,170	637,889	315,908	42,526	17,719	21,263	81,508	1,392,013	2,095,746
1990	280,518	49,611	330,129	226,831	147,864	178,760	224,330	81,523	22,790	6,582	110,895	888,680	1,218,809
1991	491,176	51,907	543,083	469,640	113,946	89,887	96,212	87,350	5,064	2,532	94,946	864,631	1,407,714
1992	290,955	6,875	297,830	219,423	36,769	6,451	14,620	17,153	0	2,532	19,685	296,948	594,778
1993	133,718	17,870	151,588	76,188	68,542	37,635	15,337	18,459	9,047	653	28,159	225,861	377,449
1994	48,370	8,682	57,052	32,122	19,976	14,992	6,150	13,384	2,532	0	15,916	89,156	146,208
1995	221,670	39,309	260,979	258,696	13,475	46,293	32,346	27,261	0	2,532	29,793	380,603	641,582
Chignik B	ay												
1989	672,315	450,163	1,122,478	660,618	89,843	81,938	174,032	40,159	13,229	0	53,388	1,059,819	2,182,297
1990	1,650,408	423,973	2,074,381	1,330,223	112,046	133,699	445,000	83,477	77,931	1,387	162,795	2,183,763	4,258,144
1991	1,119,262	486,770	1,606,032	1,065,392	98,759	48,866	131,640	67,386	66,421	0	133,807	1,478,464	3,084,496
1992	1,150,083	323,334	1,473,417	1,307,665	91,362	69,122	34,071	0	14,828	0	14,828	1,517,048	2,990,465
1993	823,018	216,258	1,039,276	790,570	467,458	307,173	186,929	22,190	60,687	3,285	86,162	1,838,292	2,877,568
1994	235,448	135,863	371,311	72,104	520,864	514,182	143,525	28,567	32,314	949	61,830	1,312,505	1,683,816
1995	173,571	93,530	267,101	206,860	3,191	52,921	174,183	82,082	14,528	0	96,610	533,765	800,866
Kujulik													
1989	83,550	13,089	96,639	78,148	722	9,150	11,386	931	0	0	931	100,337	196,976
1990	394,255	122,744	516,999	380,715	2,193	10,486	10,206	2,525	0	0	2,525	406,125	923,124
1991	8,256	949	9,205	14,470	0	0	0	0	0	0	0	14,470	23,675
1992	108,457	18,988	127,445	129,874	760	760	3,038	0	1,519	0	1,519	135,951	263,396
1993	107,646	16,184	123,830	100,150	81,074	29,658	1,367	0	0	0	0	212,249	336,079
1994	7,736	3,190	10,926	9,141	7,322	4,952	6,471	0	2,279	0	2,279	30,165	41,091
1995	851	28,922	29,773	2,772	0	911	456	0	0	0	0	4,139	33,912
CHIGNIK D	ISTRICT TOTALS	 S											
1989	1,451,509	1,239,777	2,691,286	1,391,667	385,664	1,511,525	1,240,964	420,381	43,361	33,676	497,418	5,027,238	7,718,524
1990	3,208,991	629,299	3,838,290	2,977,997	276,802	431,850	930,277	276,486	100,721	6,582	383,789	5,000,715	8,839,005
1991	1,978,830	541,103	2,519,933	1,898,654	212,706	138,753	229,574	161,872	71,486	3,270	236,628	2,716,315	5,236,248
1992	1,582,231	351,412	1,933,643	1,694,201	130,859	77,317	56,757	21,271	35,259	3,270	59,800	2,018,934	3,952,577
1993	1,119,174	251,937	1,371,111	994,727	658,849	384,345	206,384	40,648	70,129	3,939	114,716	2,359,021	3,730,132
1994	335,740	159,829	495,569	126,937	570,773	546,992	159,978	42,936	37,371	949	81,256	1,485,936	1,981,505
1995	456,542	165,594	622,136	541,142	19,515	100,618	209,445	112,050	15,020	2,532	129,602	1,000,322	1,622,458

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Table 5. Relative abundance by weight of the 20 most encountered species of groundfish and invertebrates captured from a trawl survey of the Chignik area, 1995.

Rank	Common Name	Species Name	% of catch by weight
1	Flathead sole	Hippoglossoides elassodon	31.9%
2	Arrowtooth flounder	Atheresthes stomias	24.2%
3	Pollock	Theragra chalcogramma	19.8%
4	Yellowfin sole	Pleuronectes aspera	5.1%
5	Pacific cod	Gadus macrocephalus	4.2%
6	Big skate	Raja binoculata	3.7%
7	Halibut	Hippoglossus stenolepis	2.6%
8	Sculpin, unid.	Family: Cottidae	1.0%
9	Dungeness crab	Cancer magister	1.0%
10	Starfish	Subclass: Asteroidea	0.8%
11	Tanner crab	Chionoecetes bairdi	0.8%
12	Rock sole	Lepidopsetta bilineata	0.6%
13	Sea anemone, unid.	Order: Actinaria	0.6%
14	Alaska plaice	Pleuronectes quadrituberculatus	0.5%
15	Jellyfish	Order Hydroida	0.3%
16	Starry flounder	Platichthys stellatus	0.3%
17	Butter sole	Isopsetta isolepis	0.3%
18	snail, unid.	Class Gastropoda	0.2%
19	Dover sole	Microstomus pacificus	0.1%
20	pink shrimp	Pandalus borealis	0.1%
	all others		0.9%

Table 6. Tanner crab population estimates from trawl surveys in the Eastern Aleutians Management Area, 1990-1995.

Fishing		Females				es by size (mi		Recruits	Postre		Total	Total	Total
Section	Juvenile	Adult	Total	<70	70-91	92-114	>114		<165 mm	>164 mm	Legal	Males	Crab
EASTERN	ALEUTIANS D	DISTRICT											
Akutan Ba	ıy												
1990	464,232	779,189	1,243,421	621,581	927,652	454,521	148,139	15,190	0	0	15,190	2,167,083	3,410,504
1991	745,793	580,768	1,326,561	812,714	355,129	533,275	374,345	13,291	13,291	0	26,582	2,102,045	3,428,606
1994	949	2,938	3,887	2,938	7,685	15,638	34,572	2,848	949	0	3,797	64,630	68,517
1995	19,077	5,696	24,773	12,521	8,294	32,136	100,690	949	8,903	0	9,852	163,493	188,266
Beaver Inf	et												
1990	943,653	190,343	1,133,996	931,323	229,433	97,915	27,056	3,093	772	0	3,865	1,289,592	2,423,588
1991	468,821	136,294	605,115	446,024	178,136	72,435	21,868	2,124	0	0	2,124	720,587	1,325,702
1994	38,944	51,619	90,563	33,995	6,696	41,034	47,663	17,028	772	0	17,800	147,188	237,751
1995	702,659	28,666	731,325	555,915	15,770	6,531	8,478	3,688	0	0	3,688	590,382	1,321,707
Unalaska/	Kalekta Bay												
1990	1,121,780	359,433	1,481,213	667,671	60,258	78,876	42,943	11,493	767	2,002	14,262	864,010	2,345,223
1991	981,240	137,467	1,118,707	920,710	167,931	41,207	25,026	8,906	0	1,001	9,907	1,164,781	2,283,488
1994	17,485	1,466	18,951	17,485	949	0	1,982	949	1,549	0	2,498	22,914	41,865
1995	23,705	7,595	31,300	17,863	3,387	10,847	1,899	1,309	0	0	1,309	35,305	66,605
Makushin	Bay												
1990	440,147	313,415	753,562	368,978	83,153	76,482	125,451	6,927	23,030	0	29,957	684,021	1,437,583
1991	89,388	149,174	238,562	76,313	85,035	51,894	70,213	5,911	29,135	2,576	37,622	321,077	559,639
1994	148,701	159,042	307,743	127,267	19,768	98,634	109,429	36,353	1,662	0	38,015	393,113	700,856
1995	125,736	85,759	211,495	93,308	25,607	38,406	51,872	2,836	8,623	0	11,459	220,652	432,147
Usof Bay													
1990	103,322	25,229	128,551	103,385	100,755	29,621	2,026	574	0	0	574	236,361	364,912
1991	89,209	70,804	160,013	232,477	259,878	66,540	26,990	4,496	2,625	0	7,121	593,006	753,019
1994	15,860	3,500	19,360	13,782	8,932	6,187	7,638	875	0	0	875	37,414	56,774
1995	36,624	3,343	39,967	42,261	10,195	6,931	4,375	0	2,625	0	2,625	66,387	106,354
Akun Bay													
1990	2,093	1,063	3,156	0	0	0	0	0	0	0	0	0	3,156
1991	0	0	0	0	1,060	0	0	0	0	0	0	1,060	1,060
1994	0	0	0	0	0	0	0	0	0	0	.0	0	0
1995	0	0	0	0	0	0	0	0	0	0	0	0	0
Pumistone	Вау												
1990	48,859	0	48,859	48,606	674	0	0	0	0	0	0	49,280	98,139
1991	24,252	235	24,487	19,208	5,865	1,173	0	0	235	0	0	26,481	50,968
1994	6,510	909	7,419	5,748	5,366	5,220	674	0	0	0	0	17,008	24,427
1995	10,299	3,542	13,841	9,495	3,965	3,753	1,349	0	0	0	0	18,562	32,403

-Continued-

Table 6. (page 2 of 2)

Fishing		Females		No.	Sublegal Mal	es by size (m	m)	Recruits	Postrecruit		Total	Total Total	Total
Section	Juvenile	Adult	Total	<70	70-91	92-114	>114	<165 mm >164 mm	Legal	Males	Crab		
Cape Idak	(												
1990	3,255	3,662	6,917	0	2,713	0	2,713	0	3,255	0	3,255	8,681	15,598
1991	119,621	2,848	122,469	122,469	3,798	949	1,899	0	0	0	0	129,115	251,584
1994	0	949	949	2,848	5,696	0	0	0	0	0	0	8,544	9,493
1995	0	0	0	0	1,899	0	0	0	0	0	0	1,899	1,899
Inanudak	Bay												
1990	4,657	0	4,657	0	0	3,110	949	0	0	0	0	4,059	8,716
1994	3,390	0	3,390	1,695	0	0	0	0	0	0	0	1,695	5,085
EASTERN	ALEUTIAN TOT	ALS											
1990	3,131,999	1,672,335	4,804,334	2,741,545	1,404,638	740,525	349277	37,276	27,823	2,002	67,101	5,303,086	10,107,420
1991	2,518,323	1,077,589	3,595,912	2,630,975	1,055,771	767,473	520340	34,728	90,571	3,577	128,876	5,103,435	8,699,347
1994	231,840	220,422	452,262	205,758	55,092	166,713	201959	58,054	4,932	0	62,986	692,508	1,144,770
1995	915,100	134,601	1,049,701	731,363	69,117	98,605	168,662	8,783	20,151	0	28,934	1,096,681	2,146,382

Table 7. Relative abundance by weight of the 20 most encountered species of groundfish and invertebrates captured from a trawl survey of the Eastern Aleutians area, 1995.

Rank	Common Name	Species Name	% of catch by weight
1	Arrowtooth flounder	Atheresthes stomias	36.2%
2	Pollock	Theragra chalcogramma	21.8%
3	Flathead sole	Hippoglossoides elassodon	11.8%
4	rock sole	Lepidopsetta bilineata	5.9%
5	rex sole	Glyptocephalus zachirus	4.5%
6	Halibut	Hippoglossus stenolepis	4.5%
7	Pacific cod	Gadus macrocephalus	4.4%
8	Greenland turbot	Reinhardtius hippoglossoides	2.2%
9	Starfish	Subclass: Asteroidea	1.8%
10	Sculpin, unid.	Family: Cottidae	1.2%
11	Tanner crab	Chionoecetes bairdi	0.9%
12	Sea anemone, unid.	Order: Actinaria	0.7%
13	sponge, unid.	Phylum: porifera	0.7%
14	Alaska skate	Bathyraja parmifera	0.5%
15	sturgeon poacher	Agonus acipenserinuss	0.4%
16	Dover sole	Microstomus pacificus	0.3%
17	English sole	Parophrys vetulus	0.2%
18	Yellowfin sole	Pleuronectes aspera	0.2%
19	snail, unid.	Class: Gastropoda	0.2%
20	sea cucumber	Class: Holothuroidea	0.2%
	all others		1.3%

Table 8. Length to weight conversion table for longnose skates, Raja rhina.

Length (cm)	Pounds	Kilograms
9	0.08	0.04
10	0.11	0.05
11	0.15	0.07
12	0.19	0.08
13	0.23	0.11
14	0.29	0.13
15	0.35	0.16
16	0.42	0.19
17	0.50	0.23
18	0.59	0.27
19	0.69	0.31
20	0.80	0.36
21	0.92	0.42
22	1.05	0.48
23	1.19	0.54
24	1.34	0.61
<b>4</b> 25	1.51	0.69
26	1.69	0.77
27	1.88	0.85
28	2.08	0.95
29	2.30	1.05
30	2.53	1.15
31	2.78	1.26
32	3.05	1.38
33	3.33	1.51
34	3.62	1.65
35	3.93	1.79
36	4.26	1.94
37	4.61	2.09
38	4.97	2.26
39	5.35	2.43
40	5.75	2.61
41	6.17	2.80
42	6.61	3.00
43	7.07	3.21
44	7.54	3.43

Length (cm)	Pounds	Kilograms
45	8.04	3.66
46	8.56	3.89
47	9.10	4.14
48	9.66	4.39
49	10.25	4.66
50	10.86	4.93
51	11.49	5.22
52	12.14	5.52
53	12.81	5.82
54	13.52	6.14
55	14.24	6.47
56	14.99	6.81
57	15.76	7.17
58	16.56	7.53
59	17.39	7.91
60	18.24	8.29
61	19.12	8.69
62	20.03	9.10
63	20.96	9.53
64	21.92	9.97
65	22.91	10.42
66	23.93	10.88
67	24.98	11.35
68	26.06	11.84
69	27.16	12.35
70	28.30	12.86
71	29.46	13.39
72	30.66	13.94
73	31.89	14.49
74	33.15	15.07
75	34.44	15.65
76	35.76	16.26
77	37.12	16.87
78	38.51	17.50
79	39.93	18.15
80	41.39	18.81

Table 9. Length to weight conversion table for the skate Genus *Bathyraja*.

Length (cm)	Pounds	Kilograms
9	0.09	0.04
10	0.12	0.06
11	0.16	0.07
12	0.21	0.10
13	0.27	0.12
14	0.33	0.15
15	0.41	0.19
16	0.49	0.22
17	0.59	0.27
18	0.70	0.32
19	0.82	0.37
20	0.95	0.43
21	1.10	0.50
22	1.26	0.57
23	1.43	0.65
24	1.62	0.74
25	1.83	0.83
26	2.05	0.93
27	2.29	1.04
28	2.55	1.16
29	2.83	1.29
30	3.13	1.42
31	3.44	1.56
32	3.78	1.72
33	4.14	1.88
34	4.52	2.05
35	4.92	2.24
36	5.34	2.43
37	5.79	2.63
38	6.26	2.85
39	6.76	3.07
40	7.28	3.31
41	7.83	3.56
42	8.40	3.82
43	9.01	4.09
44	9.64	4.38

Length (cm)	Pounds	Kilograms
45	10.29	4.68
46	10.98	4.99
47	11.70	5.32
48	12.44	5.66
49	13.22	6.01
50	14.03	6.38
51	14.87	6.76
52	15.74	7.16
53	16.65	7.57
54	17.59	8.00
55	18.57	8.44
56	19.58	8.90
57	20.62	9.37
58	21.70	9.86
59	22.82	10.37
60	23.98	10.90
61	25.17	11.44
62	26.40	12.00
63	27.67	12.58
64	28.99	13.18
65	30.34	13.79
66	31.73	14.42
67	33.16	15.07
68	34.64	15.75
69	36.16	16.44
70	37.72	17.15
71	39.33	17.88
72	40.98	18.63
73	42.67	19.40
74	44.41	20.19
75	46.20	21.00
76	48.03	21.83
77	49.92	22.69
78	51.85	23.57
79	53.82	24.47
80	55.85	25.39

Table 10. Results of bitter crab sampling in Alitak Bay, 1991-1995.

	BCS SAMPLING RESULTS									
	19	991	1992		1993		1994		1995	
	Sample	percent	Sample	percent	Sample	percent	Sample	percent	Sample	percent
STN	size	positive	size	positive	size	positive	size	positive	size	positive
ALA	30	6.7	30	0.0	30	3.5	29	0.0	29	0.0
ALB	24	23.8	23	8.7	11	0.0	0	0.0	0	0.0
ALC	29	0.0	30	0.0	30	13.3	29	3.4	30	0.0
ALD	30	0.0	29	0.0	30	3.3	9	11.1	1	0.0
ALF	30	6.7	29	0.0	30	10.0	17	0.0	28	0.0
ALG	30	3.3	30	3.4	30	3.4	28	10.7	18	11.1
ALH	30	3.3	30	10.0	30	6.7	30	3.3	30	6.7
ALI	30	13.3	30	6.7	30	6.7	30	3.3	30	0.0
ALJ	28	10.7	30	3.3	30	3.3	30	16.7	14	7.7
ALK	17	41.2	15	20.0	30	6.7	9	55.6	2	50.0
ALL	30	6.7	28	7.1	30	3.3	30	3.3	30	3.3
ALM	27	48.1	3	33.3	30	6.7	6	0.0	5	0.0
ALO	28	42.9	30	24.1	30	13.3	30	0.0	29	0.0
ALP	30	60.0	29	37.9	30	26.7	30	23.3	30	23.3
ALQ	30	60.0	29	27.6	30	16.7	30	3.3	29	36.7
ALR	30	33.3	29	24.1	30	10.0	30	3.3	21	0.0
TOTALS	453	16.0	424	18.1	461	7.9	367	5.6	326	7.4

		BCS F	POPULATION	1		STATION POPULATION				
STN	1991	1992	1993	1994	1995	1991	1992	1993	1994	1995
ALA	1,475	0	83,142	0	0	22,010	21,600	2,375,473	9,570	10,527
ALB	1,041	349	0	0	0	4,375	4,010	5,312	0	0
ALC	0	0	337,756	577	0	156,715	78,213	2,539,517	132,121	56,880
ALD	0	0	3,391	577	0	185,865	109,095	102,745	5,195	1,154
ALF	35,156	0	46,994	0	0	524,723	136,345	469,941	17,089	26,583
ALG	2,820	899	9,735	4,153	2,054	85,459	26,431	286,332	38,765	18,501
ALH	5,772	5,640	9,136	2,404	2,487	174,913	56,400	136,361	72,107	37,124
ALI	9,504	4,146	7,767	8,718	0	71,461	61,884	115,930	261,534	81,775
ALJ	16,520	2,228	67,734	8,577	772	154,391	67,504	2,052,534	51,464	10,025
ALK	3,267	1,762	20,719	2,753	734	7,929	8,810	309,238	4,956	1,468
ALL	2,987	4,015	3,826	1,850	2,513	44,586	56,543	115,930	55,494	76,153
ALM	9,959	713	25,639	0	0	20,704	2,142	382,666	4,284	3,570
ALO	34,198	29,687	18,413	0	0	79,716	123,183	138,442	56,355	68,051
ALP	56,142	91,237	69,726	11,710	13,279	93,570	240,731	261,146	50,188	56,993
ALQ	39,427	64,094	42,191	2,844	17,795	65,712	232,225	252,640	85,330	48,486
ALR	99,228	65,675	25,651	1,086	0	297,982	272,509	256,514	32,583	12,441
TOTALS	317,496	270,445	771,820	45,249	39, <b>634</b>	1,990,111	1,497,625	9,800,721	877,035	509,732

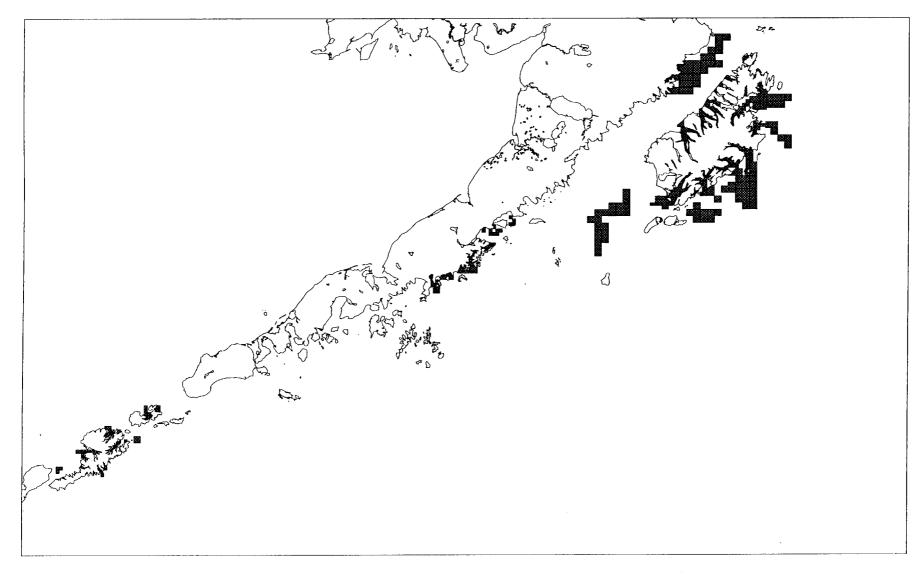


Figure 1. Areas surveyed during the 1995 Westward Region trawl survey (dark portions).

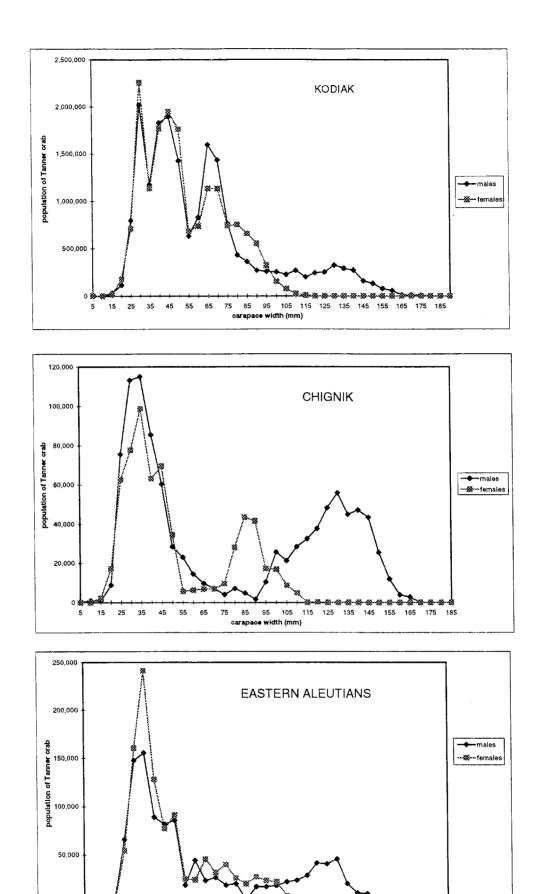


Figure 2. Carapace width frequency of male and female Tanner crab captured during the 1995 Westward Region trawl survey.

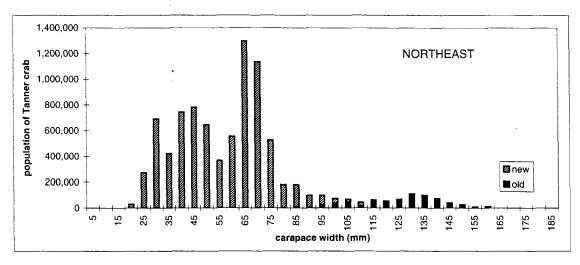
15

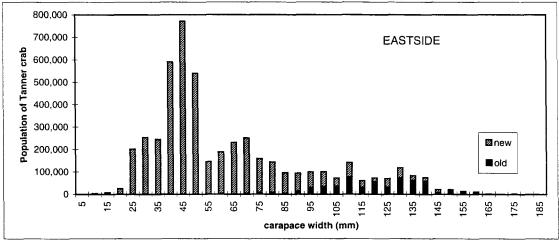
85

carapace width (mm)

115 125

135 145 155 165 175 185





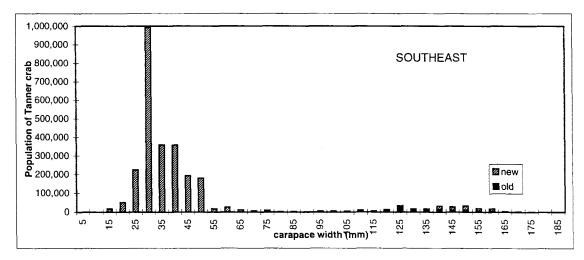
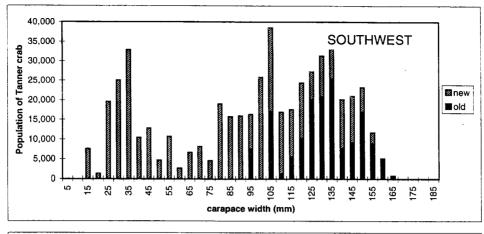
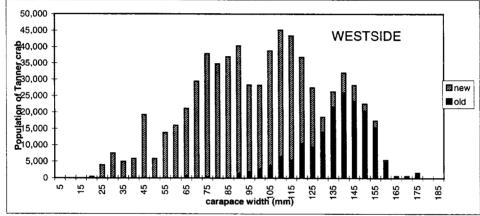


Figure 3. Stacked bar graphs of carapace width frequency by shell condition of the estimated population of male Tanner crab from the Northeast, Eastside, and Southeast Sections of Kodiak Island taken during the 1995 trawl survey.





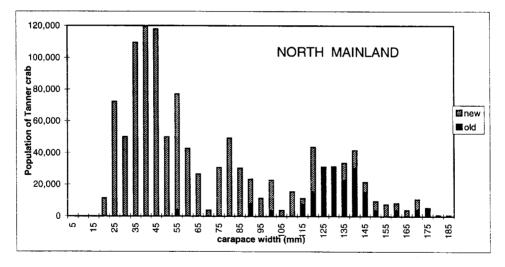
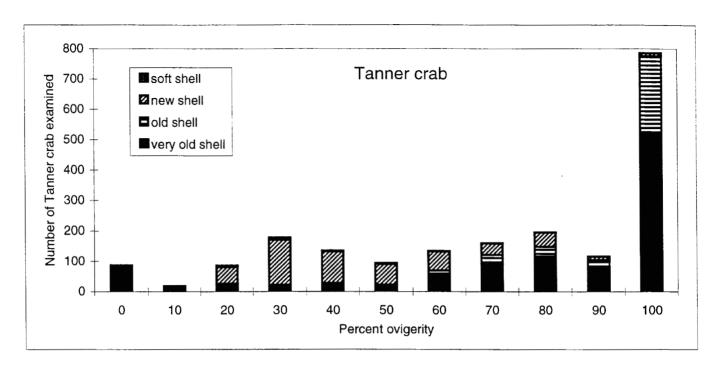


Figure 4. Stacked bar graphs of carapace width frequency by shell condition of the estimated population of male Tanner crab from the Southwest, Westside, and North Mainland Sections of Kodiak Island taken during the 1995 trawl survey.



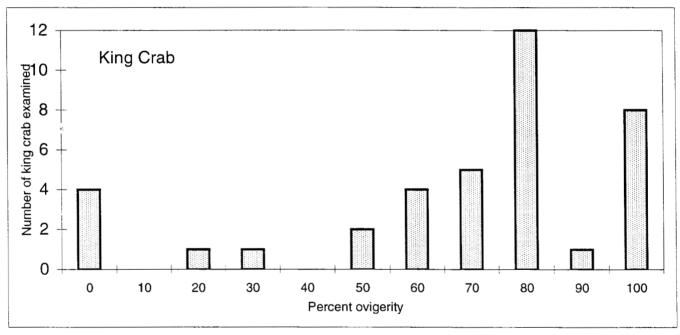


Figure 5. Percent ovigerity of king and Tanner crab captured during the Kodiak trawl survey, 1995. Tanner crab ovigerity is presented as a stacked bar graph of shell ages.

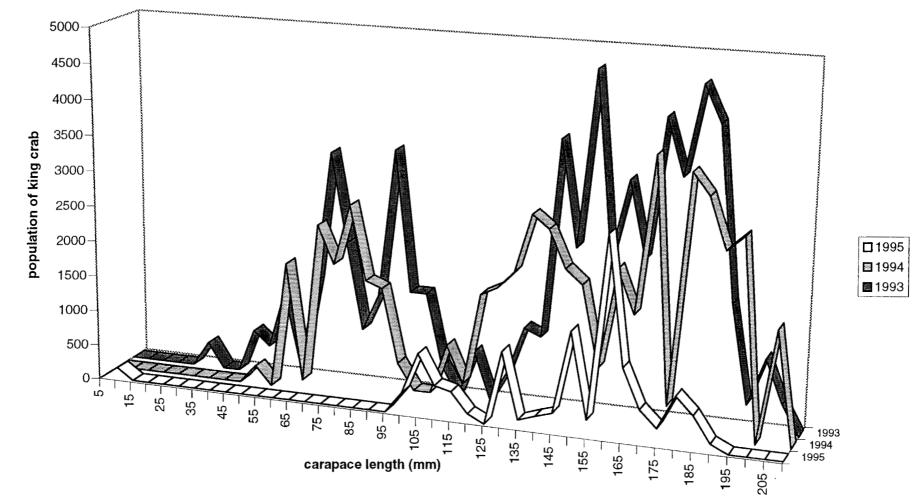


Figure 6. Kodiak male red king crab population by year, 1993-1995.

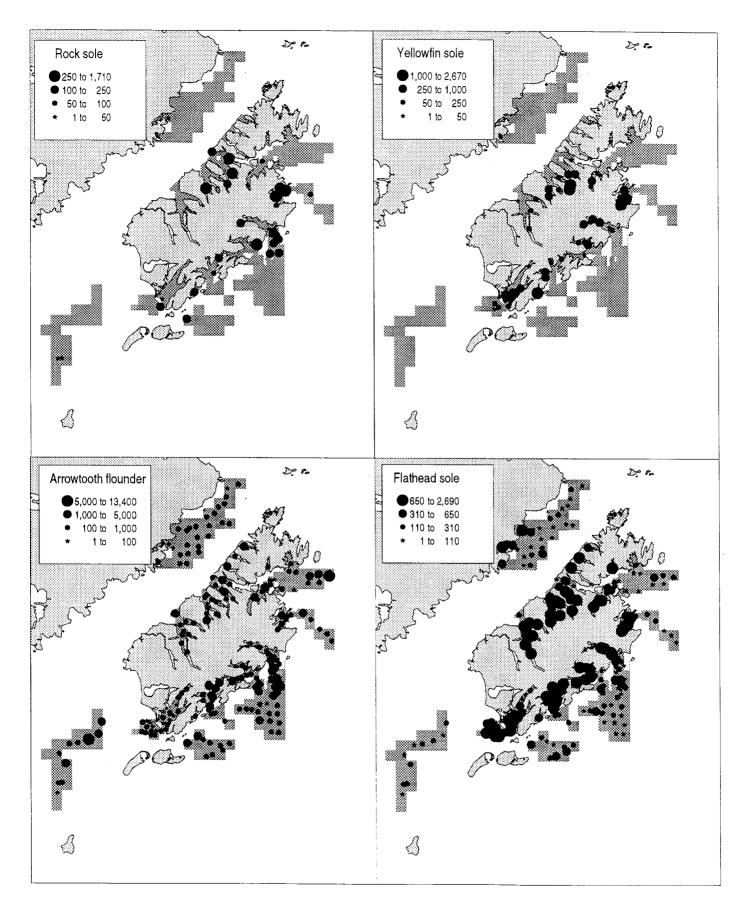


Figure 7. Plotted catch of arrowtooth flounder, flathead sole, rock sole, and yellowfin sole from the 1995 Kodiak trawl survey. Surveyed areas shown in dark gray.

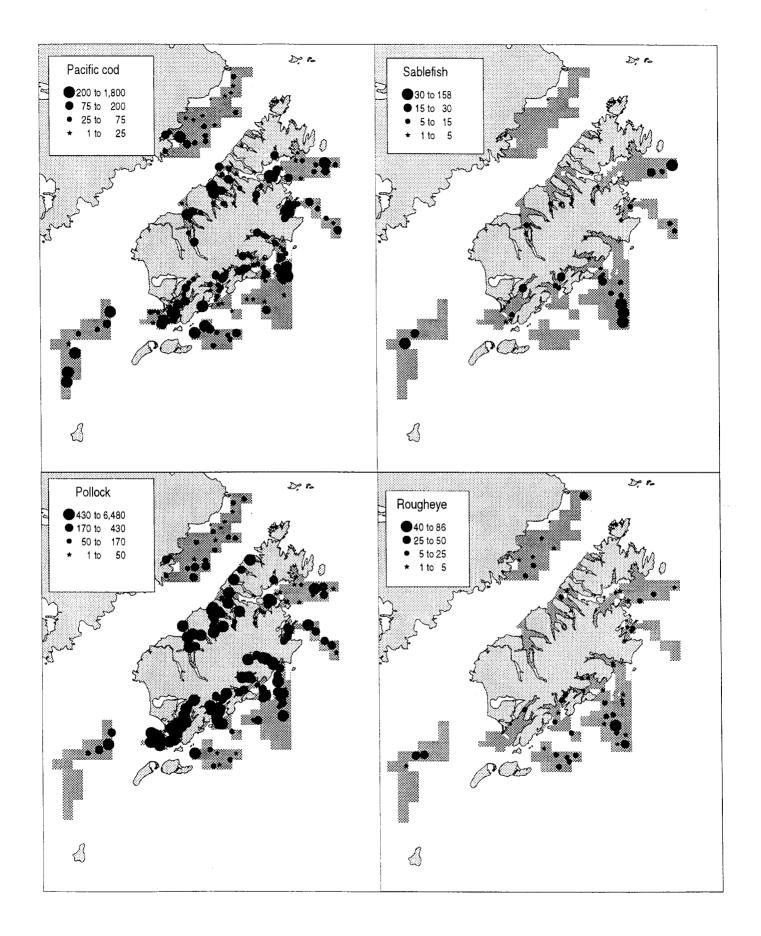


Figure 8. Catch of Pacific cod, sablefish, pollock, and rougheye rockfish in pounds per nautical mile from the 1995 Kodiak trawl survey. Surveyed areas shown in dark gray.

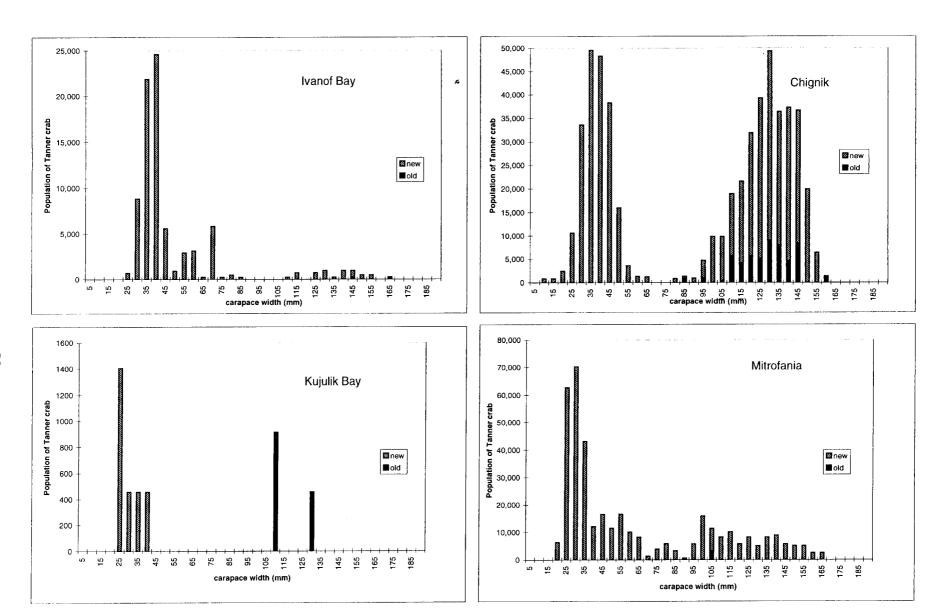


Figure 9. Stacked bar graphs of carapace width frequency by shell condition of the estimated populations of male Tanner crab from Chignik Bay, Kujulik, Mitrofania, and Ivanof Bay areas of the Chignik Management District taken during the 1995 trawl survey.

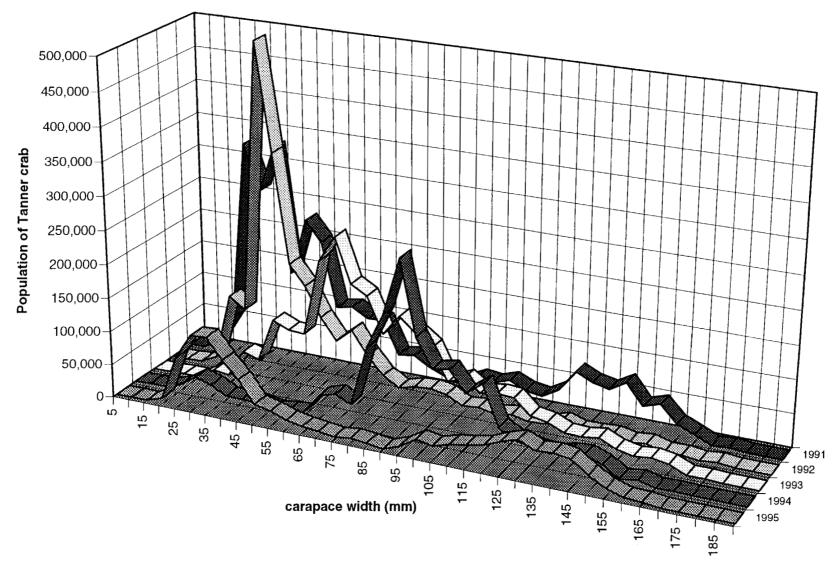
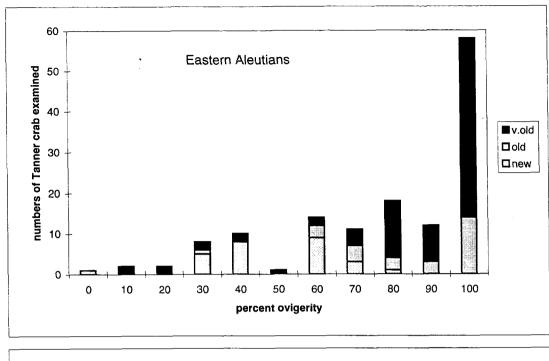


Figure 10. Carapace width of male Tanner crab from the Chignik Management District taken by trawl survey, 1991-1995.



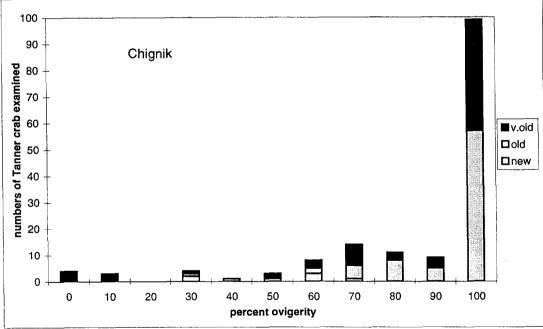


Figure 11. Percent ovigerity of Tanner crab captured during a trawl survey of the Chignik and Eastern Aleutians Management Areas, 1995. Percent ovigerity is represented as a stacked bar graph.

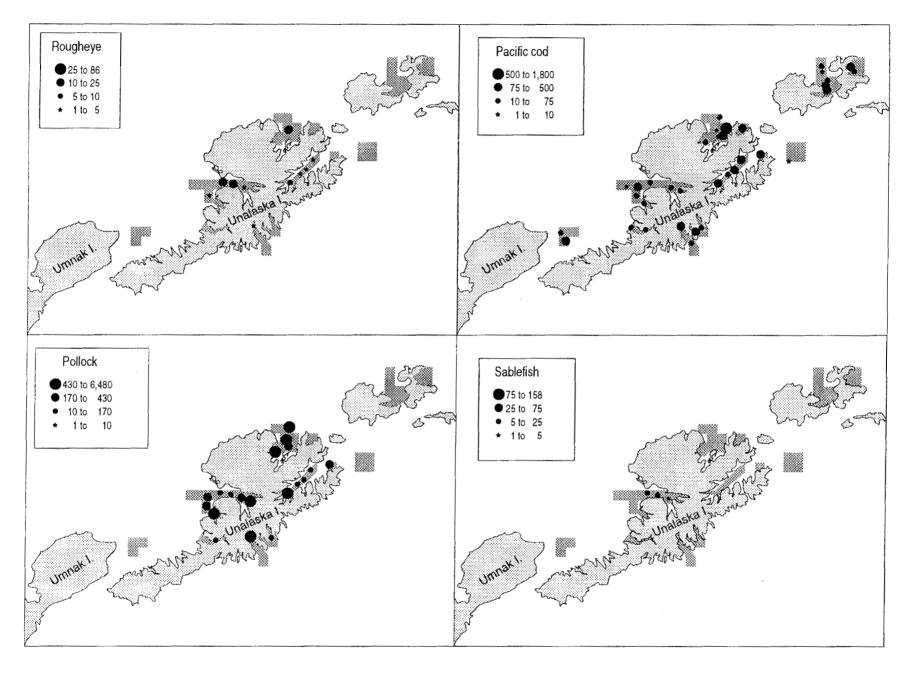


Figure 12. Catch of Pacific cod, sablefish, pollock, and rougheye rockfish in pounds per nautical mile from the 1995 Eastern Aleutians trawl survey. Surveyed areas shown in dark gray.

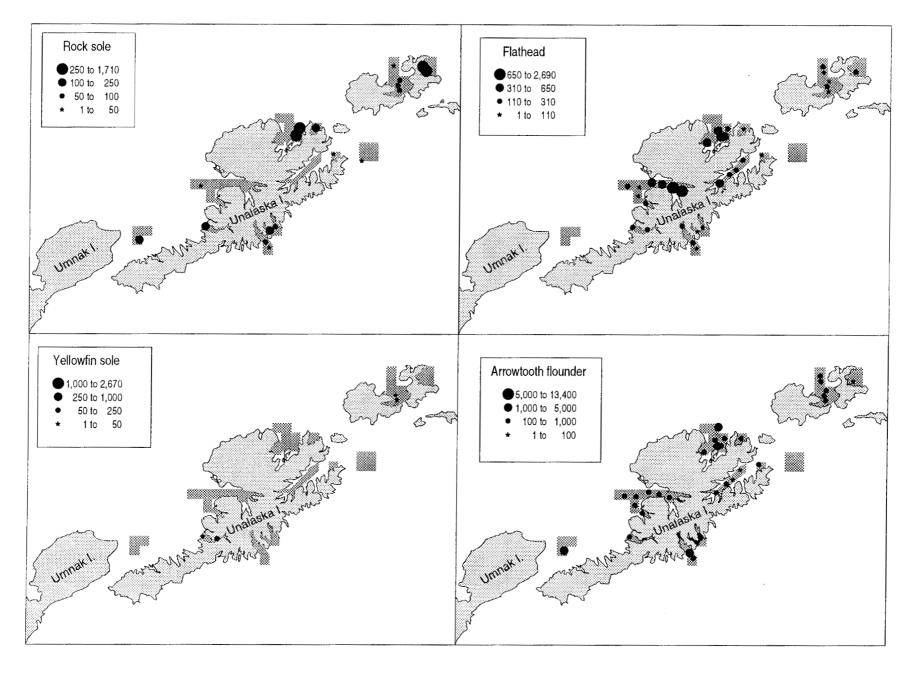


Figure 13. Catch of rock sole, yellowfin sole, and flathead sole, and arrowtooth flounder in pounds per nautical mile from the 1995 Eastern Aleutians trawl survey. Surveyed areas shown in dark gray.

**APPENDIX** 

The following definitions were developed for characterizing Tanner crab, Chionoecetes bairdi, examined in this report.

Newshell	Hard exoskeletal animal; the dorsal side of the carapace
	brownish-red; no apparent scratching on ventral side; epifauna
	absent or limited; and dactyli, pterygostomial and branchial

spines sharp.

Oldshell An apparent skip molt; carapace hard and brownish; thoracic

sternum and ventral sides of legs with numerous scratches and abrasions; dactyli, pterygostomial and branchial spines worn;

epifauna may be present.

Very Oldshell An obvious skip molt; carapace hard, dark brown to blackish;

thoracic sternum and ventral side of legs with multiple scratches and abrasions; underside of legs usually dark yellow-brown; dactyli, pterygostomial and branchial spines heavily worn;

epifauna usually present: e.g., large barnacles.

Molting Physiological events immediately preceeding ecdysis and

including ecdysis.

Skip Molt A crab which has retained its exoskeleton (not molted) for more

than 12 months.

Crab Measurements Crab measurements are made in millimeters with a vernier

calipers and refer to carapace width (CW) inside the spines,

however legal size is measured outside the spines.

Prerecruit IV Male Tanner crab less than or equal to 69 mm in carapace

width and four or more molts from attaining legal size. Note that this group includes prerecruit IV, V and VI and younger

crabs but are referred to a prerecruit IV's herein.

Prerecruit III Male Tanner crab 70-91 mm in carapace width and three molts

from attaining legal size.

Prerecruit II Male Tanner crab 92-114 mm in carapace width and two molts

from attaining legal size.

Prerecruit I Male Tanner crab 115-139 mm in carapace width and one molt

from attaining legal size.

Recruit Legals	Newshell male Tanner crab 140-164 mm in carapace width, recruited to legal size in year of capture.
Postrecruit Legals	Male crab that have been legal size at least one year: defined as oldshells and very oldshells 140-164 mm and all males >164 mm in carapace width.
Total Legals	All male Tanner crab >139 mm in carapace width outside the spines.
Females	Identified as adult or immature by visual observation of abdominal flap.
The following definitions were developed for characteristics.	acterizing king crab, Paralithodes camtschaticus, examined in this
Carapace Length	The straight line distance across the carapace from the posterior margin of the right eye orbit to the medial-posterior margin of the carapace.
Legal Size	The Board of Fisheries sets the legal size of king crab. In the Kodiak Management Area, legal size is set at seven inches (178 mm) or greater in width of shell. In the Alaska Peninsula and Dutch Harbor Management Areas, legal size is set at 6 1/2 inches (165 mm). Measurements are made including the spines, as the straight line distance across the carapace at a right angle to a line midway between the eyes to the midpoint of the posterior portion of the carapace.
Juvenile Females	Nonovigerous females with carapace lengths of less than 116 mm.
Adult, Mature Females	Ovigerous and nonovigerous females with carapace lengths greater than 115 mm.
Adult, Mature Males	Male king crabs with carapace lengths greater than 130 mm.
Newshell Males	Individuals that molted during the last molting season (generally January through April).
Oldshell Males	(Skipmolts) Individuals that failed to molt during last molting season.
Very Oldshell Males	(Double Skipmolts) Individuals that failed to molt during the last two or more molting seasons.

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Prerecruit IV	Individuals estimated to be 4 or more years from legal size and less than 95 mm in length in the Kodiak Management Area, lessthan 79 mm in the Alaska Peninsula and Dutch Harbor Management Areas.
Prerecruit III	Individuals estimated to be 3 years from legal size and 95-112 mm in length in the Kodiak Management Area, and 79-95 mm in the Alaska Peninsula and Dutch Harbor Management Areas.
Prerecruit II	Individuals estimated to be 2 years from legal size and 113-130 mm in length in the Kodiak Management Area, and 96-115 mm in the Alaska Peninsula and Dutch Harbor Management Areas.
Prerecruit I	Individuals estimated to be 1 year from legal size which includes all sublegals greater than 130 mm in length in the Kodiak Management Area, and greater than 116 mm in length in the Alaska Peninsula and
Recruits	Newshell males which are legal size and are in their first year of availability to the fishery which includes crabs less than or equal to 164 mm in length in the Kodiak Management Area, and less than or equal to 152 mm in length in the Alaska Peninsula and Dutch Harbor Management Areas.
Postrecruit	Males which are legal size and old shell or very old shell or males which are of greater length than recruit crab.

Appendix B. Fishing log and catch data from the Westward Region trawl survey, 1995. Temperatures where recorded in degrees Celsius.

111												40			
Haul	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Location	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD						
Month/Day/Year	6/19/95	6/20/95	6/20/95	6/20/95	6/20/95	6/21/95	6/21/95	6/21/95	6/21/95	6/21/95	6/21/95	6/22/95	6/22/95	6/22/95	6/22/95
Station	KZK	CHE	CHE	CHI	CHJ	MOGX	283	284	257	256	255	MOXX	MOPX	MOLX	MOEX
Longitude Start	152 33.2	152 26.9	152 27.6	152 22.8	152 23.3	152 11.4	151 58.7	151 48.5	151 39.4	151 49.1	151 57.2	152 14.3	152 15.9	152 9.8	152 22.3
Latitude Start	57 58.8	57 40.6	57 40.6	57 43.7	57 44.2	57 56.6	57 59.9	58 0.3	58 3.5	58 4.3	58 3.3	58 9.5	58 5.7	58 5.3	57 56.9
Heading, Degrees	5	34	40	125	181	272	90	65	270	270	272	130	53	150	56
Average Depth (m)	187	20	15	101	69	198	172	139	157	137	132	179	172	174	124
Distance Fished (km)	1.9	1.3	0.9	1.9	1.5	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.5
Bottom Temperature	5.1	6.5	6.6	5.7	5.7	5.1	4.7	5.2	4.7	5.7	5.7	5.1	5.3	5.2	5.7
							160	#C1							
Pollock	0	0	0	41.9	6.1	11	Kilog 5.1	rams/Kilom 42.1	eter 3.9	91.4	423.5	2.4	2.7	5.1	0.9
Pacific Cod	7.1	32.2	1	30.9	8.3	2.2	11.5	33.1	9.3	51.7	11.8	2	5.4	9.8	20.2
Pac Ocean Perch	0	02.2	Ö	0	0.5	0	0	1.2	0.2	0.5	0	0	0	0	0
Rougheye Rkfish	0	0	0	0.5	0	2.7	1.7	0	1	0.5	0	0	0	0	0.9
Thornyhead Rkfh	0	0	0	0.5	0	0	0	0	Ö	0	0	0	0	0	0.9
Other Rockfish	0	0	0	0	0	0	0	6.9	0.5	1	4.2	0	0	0	0
Sablefish	0	0	0	0	0	0	_	3.2	9.1	0	4.2	0	0	0	0
	0	0	0	0	0	0	3.7 0	0	9.1	0	0	0	0	0	0
Herring Salmon	-	0	0	0	0	0	-	0	0	0	0	0	0		_
	0		8.8				0	0	0	0	0	_	0	0	0
Sculpins	0.2	26.9		108.5	35.8	0.2	0	0	0	0	0	0	-	22.3	7.3
Other Roundfish	0.2	0	0	26.2	2.4	3.2	0.2	_	_	-	-	17.6	7.6	7.6	0.9
TOTAL ROUNDFISH	7.6	59.1	9.8	207.9	52.7	19.3	22.3	86.5	24	144.5	439.4	22	15.7	44.8	30.3
Arrowtooth Findr	27.9	0	0	511.9	71.3	3.4	30.9	44.8	3273.4	366.4	389.4	28.4	106.3	115.8	37.7
Flathead Sole	41.4	13.3	0	82,3	101.9	16.7	13.5	12.5	74.5	58.8	82	41.6	26	17.9	13.5
Rock Sole	0	187.5	133.7	139.6	91.8	0	0	0	0	0	0	0	0	0	0
Rex Sole	0	0	0	0	0	0	0	2.7	0	0	0	0	0	0	Ó
Dover Sole	0	0	0	0	0	8.3	4.2	2.7	65.9	52.4	0	0	26	8.8	0
Pac Halibut	0	0.3	1.5	54.1	5.5	12	37.7	29.4	138.9	7.3	12.2	17.4	19.3	12	7.7
Starry Flndr	Ö	0.0	0	0	0.0	0	0	0	0	0	0	0	0	0	0
Yellowfin Sole	0	53.5	5.4	108.5	112.1	0	0	ő	ő	0	Ö	ő	0	ő	Ö
Other Flatfish	0	53.5	20.6	0	0	0	0	0	ő	0	0	o	Ö	Ö	0
TOTAL FLATFISH	69.3	308.3	161.2	896.4	382.7	40.4	86.2	92.1	3552.6	484.9	483.7	87.4	177.6	154.5	58.8
101712121111011	00.0	000.0	101.2	000.1	502.1		00.2	VE. 1	0002.0	.00	100.7	0	.,,.0	101.0	00.0
Skates	1.5	0	0	20.6	9.2	11.8	13.5	8.8	82.3	11.8	14	13.7	50	22.3	20.5
Spiny Dogfish	0	0	0	0	0	0	0	0	0	2	0	0	0	0	O
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	5.1	0.3	0.5	0.2	0.3	2.7	0	0.2	0.2	0.5	0.2	81.3	21.8	87.7	9.2
Red King Crab	0	19.9	6.4	0.2	0.5	0	0	0.2	0.2	0.5	0.2	01.3	0	07.7	0
Dungeness Crab	0	10.5	0.4	1.2	0	0	0	Ö	0	0	0	ő	0	0	0
Shrimp	0.5	0.3	0	0	0	0.2	0.2	0.2	0	0	0.7	0	0.5	0.2	0.3
•	0.5	0.3	0	0	0	0.2	0.2	0.2	2	0.2	6.6	0	0.5	0.2	0.3
Scallop	_		47.5				5.4	7.6	10.5	0.2	2			3.9	
Other Inverts	10	1 22 7		0	145.7	28.7						14.2	40.4		1.2
TOTAL INVERTS	15.7	22.7	54.4	1.5	146	31.6	5.6	8.8	12.7	1.5	9.6	95.5	62.7	91.8	11
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CATCH (kg/km)	94.1	390.1	225.3	1126.4	590.6	103.1	127.6	196.2	3671.6	644.6	946.6	218.7	305.9	313.5	120.6

Appendix B. (Page 2 of 20)

Haul	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Location	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD		N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD
Month/Day/Year	6/22/95	6/22/95	6/23/95	6/23/95	6/23/95	6/23/95	6/23/95	6/23/95	6/23/95	6/23/95	6/24/95	6/24/95	6/24/95	6/24/95	6/24/95
Station	MONX	KZR	KZS	KZO	KZJ	KZG	KZF	KZE	KZC	KZD	KZA	KZB	CHF	CHA	CHA
Longitude Start	152 29.5	152 35.2	152 35.2	152 33.4	152 37.4	152 36.0	152 39.6	152 40.5	152 44.8	152 47.7	152 53.0	152 52.0	152 19.0	152 25.9	152 27.1
Latitude Start	58 1.7	58 7.9	58 8.0	58 0.9	57 58.6	57 56.9	57 57.9	57 55.5	57 51.7	57 52.7	57 46.0	57 48.6	57 41.7	57 37.1	57 36.2
Heading, Degrees	0	184	11	41	20	289	181	190	33	43	7	27	209	47	39
Average Depth (m)	194	113	95	198	133	133	119	97	60	95	38	55	137	51	18
Distance Fished (km)	1.9	1.9	1.9	1.9	1.9	1.9	1.5	1.9	1.7	1.5	1.9	1.5	1.9	1.9	1.3
Bottom Temperature	5	3	3.1	5.1	5.7	5.5	5.7	5.9	6.1	6	5.1	5.3	5.5	5.6	5.9
							-	rams/Kilom							
Pollock	1.7	81.6	33.6	4.9	40.7	98.2	150	85.2	1.9	5.5	1.5	8.6	6.6	57.3	14.7
Pacific Cod	2.7	3.9	18.9	19.3	32.6	30.1	56.6	9.8	0	12.6	16.9	20.8	0	24.7	4.9
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	0.5	0	0	0.5	0.5	0	0	0	0	0	0	0	1	0.2	0
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0	0	0.2	0	0	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0	0	0	0	0.9	0.2	0	0	0	0.3
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sculpins	0.2	0	0	0.2	0	0	21.1	0	0	0	27.9	26.9	0.5	45.8	27.6
Other Roundfish	0.2	0	0	0.2	0.2	0	7.3	3.2	0	4.3	0.2	4	1.2	5.6	3.5
TOTAL ROUNDFISH	5.4	85.5	52.4	25.2	74	128.6	235.1	98.2	1.9	23.3	46.8	60.3	9.3	133.7	51.1
Arrowtooth Findr	19.8	29.1	0	45.6	30.6	190.8	158.9	28.4	104.2	346	0	0	43.6	91.6	0.7
Flathead Sole	15.4	180.3	176.6	69.6	24.2	136.2	105.9	56.8	159.7	86.3	25.7	202.1	96.3	160.2	59.1
Rock Sole	0	0	0	0	0	0	12.2	0	0	0	1	0	0	0	14.7
Rex Sole	0.2	0	0	0.	0	0	28.2	0	0	0	0	0	0	0	0
Dover Sole	0	0	0	0	0	0	0	0	0	26	0	0	0	0	0
Pac Halibut	21.6	0	18.4	31.8	4.2	14.7	56.3	14.2	14.2	26.9	0	0	0	12.7	1.4
Starry Flndr	0	0	0	0	0	0	0	0	0	0	19.3	128	0	0	14.7
Yellowfin Sole	0	0	9.3	0	0	0	0	0	7.1	8.6	42.9	101	0	343.4	162.3
Other Flatfish	0	0	6.1	0	0	0	0	0	0	0	0	O	0	120	73.8
TOTAL FLATFISH	57.1	209.4	210.4	147	59	341.7	361.6	99.4	285.2	493.8	88.9	431.1	139.9	727.9	326.8
Skates	0	11.3	0	28.7	0	20.8	5.8	11.5	39.7	17.5	0	0	18.9	81.3	5.6
Spiny Dogfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	18.6	19.3	34.8	6.9	1.5	2.9	0.6	1	0.3	2.1	3.2	13.5	13.5	0.2	0
Red King Crab	0	0	0	0	0	0	0	0	0	0	0	1.8	0	4.4	4.2
Dungeness Crab	0	0	0	0	0	0	0	0	0	0.6	0	0.6	0	3.7	1
Shrimp	0.2	2.4	1.5	0.2	0.2	0.5	2.8	0	0	0	1.7	0.6	0.2	0	0
Scallop	0	0	0	0	0	0	0	0	1.4	0.6	0	0	0	0	0
Other Inverts	3.9	0.2	5.9	28.7	14.5	32.8	88.8	0	184.2	70.1	1.5	0	7.1	2.9	45.8
TOTAL INVERTS	22.8	22	42.1	35.8	16.2	36.2	92.2	1	185.9	73.5	6.4	16.5	20.8	11.3	51.1
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CATCH (kg/km)	85.2	328.2	304.9	236.6	149.2	527.3	694.7	210.1	512.7	608	142.1	507.9	188.8	954.2	434.6
						_									

Appendix B. (Page 3 of 20)

Haul	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Location	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	E.KOD	E.KOD	E.KOD
Month/Day/Year	6/24/95	6/24/95	6/25/95	6/25/95	6/25/95	6/25/95	6/25/95	6/26/95	6/26/95	6/26/95	6/26/95	6/26/95	6/28/95	6/28/95	6/28/95
Station	CHA	CHB	369X	395	420	421	444	CHK	CHK	CHL	CHB	CHB	UGJ	UGM	UGI
Longitude Start	152 26.9	152 21.5	152 3.4	151 56.2	151 48.2	151 41.7	151 37.5	152 18.6	152 18.3	152 14.3	152 22.3	152 23.2	152 27.7	152 32.2	152 32.5
Latitude Start	57 36.6	57 39.8	57 45.0	57 41.6	57 36.9	57 34.6	57 31.0	57 43.4	57 43.0	57 43.9	57 39.7	57 38.9	57 21.4	57 19.3	57 21.3
Heading, Degrees	40	212	181	124	141	130	333	230	288	67	39	44	8	0	353
Average Depth (m)	35	88	113	113	126	121	168	150	150	183	110	95	73	102	95
Distance Fished (km)	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.5	1.9	1.9	1.9	1.9
Bottom Temperature	5.7	5.3	5.9	5.8	5.7	5.7	5.4	5.9	5.9	5.9	5.4	5.3	5.3	5.9	6
						Kilogra	.ms/Kilomet	er							
Pollock	23.5	0	440.4	65.9	100.2	44.6	10.3	40.2	9.3	0	65.2	0	0	64.2	0
Pacific Cod	13.2	7.8	34	9.8	13.5	3.4	40.9	29.6	7.8	10.5	49.6	3.7	11.3	4.2	0
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	0	0	0	0	0	0	0	0.2	1.2	0	0	0	0	0	0
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	4.2	0	0	0	0	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	1.5	2	1	1.2	0	0	0	0	0	0
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sculpins	0	93.1	0	10	7.1	0	0	30.1	0	0	52.4	0	0	0	0
Other Roundfish	7.1	2.9	Ö	1.5	0	1	0	2.4	15.9	6.1	0	2.4	16.7	2.9	ō
TOTAL ROUNDFISH	43.8	103.8	474.4	91.4	120.7	50.5	53.1	103.6	35.5	16.7	167.2	6.1	27.9	71.3	Ö
Arrowtooth Findr	0.7	31.1	825.9	60.7	109.7	118.8	74.9	231	110	207.9	2.1	154.1	149.6	133.5	267.9
Flathead Sole	164.8	480.3	66.1	35.5	23.8	9.8	16.9	200.8	148.4	28.7	483.4	321.8	50	69.6	145.5
Rock Sole	0	0	0	15.2	0	0	0	160.7	11	0	0	0	28.2	0	11.5
Rex Sole	0	0	11	11.3	52.4	94.1	14.9	0	0	0	0	0	14.5	0	0
Dover Sole	0	0	0	0	0	24.7	4.7	0	0	0	0	0	0	0	0
Pac Halibut	0.2	10	9.3	12.5	22.3	27.7	5.1	20.8	9.3	286.6	6.7	26.9	9.3	0	15.4
Starry Findr	0	108.5	0	0	0	0	0	0	0	0	117.6	237.8	66.4	0	0
Yellowfin Sole	101.9	325.3	0	0	0	0	0	0	0	0	0	237.8	0	0	0
Other Flatfish	242	0	44.1	131.8	19.1	34.5	5.6	0	0	0	0.9	0	152.1	0	68.8
TOTAL FLATFISH	509.7	955.2	956.4	267	227.3	309.6	122.2	613.3	278.7	523.2	610.8	978.5	470	203	509.2
Skates	0	123.7	20.1	3.2	4.4	8.6	7.1	19.3	1.5	10.8	53.3	153.3	11.3	7.6	44.8
Spiny Dogfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T Out	0.0	0.0	0.0	0	0	0	0.0	00.4	70.0	7.0	4.0		0	0.0	0.4
Tanner Crab	0.2	3.2	0.2	0	0	0	0.2	39.4	72.3	7.8	1.2	1.5	•	2.9	2.4
Red King Crab	0	8.3	0	0	0	0	0	0	0	0	0	23.8	0	0	0
Dungeness Crab	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shrimp	0	0	0	0	0	0	0	0	0.5	0	2.8	1.5	0	0.5	0.7
Scallop	0	0	0	0	1.2	2.2	0.2	0	0	0	0	0	0.2	0.2	1.5
Other Inverts	6.4	0	0	48.7	4.7	22.3	0.7	60.5	121.7	251	24.2	27.9	41.6	171.9	199.1
TOTAL INVERTS	6.9	11.5	0.2	48.7	5.9	24.5	1.2	99.9	194.5	258.9	28.2	54.6	41.9	175.6	203.8
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CATCH (kg/km)		1194.2	1451.2	410.2	358.3	393.1	183.7	836.2	510.2	809.5	859.4	1192.5	551.1	457.5	757.8

Appendix B. (Page 4 of 20)

The state of the s			40												
Haul	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Location	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD						
Month/Day/Year	6/29/95	6/29/95	6/29/95	6/29/95	6/29/95	6/29/95	6/29/95	6/29/95	6/30/95	6/30/95	6/30/95	6/30/95	6/30/95	6/30/95	6/30/95
Station	UGF	UGG	486B	486A	510B	510C	511A	511B	UGAC	UGAB	UGAA	UGB	UGC	UGD	UGE
Longitude Start	152 34.1	152 30.2	152 25.2	152 29.4	152 31.7	152 33.0	152 28.1	152 24.8	152 59.6	152 53.8	152 51.3	152 45.4	152 42.6	152 36.7	152 35.8
Latitude Start	57 24.4	57 23.0	57 19.5	57 17.6	57 16.1	57 12.5	57 12.7	57 12.9	57 27.4	57 28.5	57 29.8	57 28.3	57 27.8	57 25.9	57 24.9
Heading, Degrees	178	88	180	0	327	29	350	5	56	90	135	170	125	290	300
Average Depth (m)	86	68	69	97	97	93	97	79	37	64	77	88	91	95	97
Distance Fished (km)	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.7	1.9	1.1	1.9	1.9	1.9	1.9	1.9
Bottom Temperature	6.4	6.3	6.8	5.9	5.5	5.2	5.5	6	3.9	3.4	3.2	5.3	5.7	5.6	5.5
							Vila m	rams/Kilome							
Pollock	20.6	96.5	0	30.9	115.8	0	Kilogi 0	1.1	116.8	29.8	54.1	530.5	255.2	135.9	142.3
Pacific Cod	10	1.2	9.6	30.6	7.3	31.1	13.2	440.3	0.5	0.8	24.2	13	12	4.7	7.6
Pac Ocean Perch	0	0	0	0	0	0	13.2	0	0.5	0.8	0	0	0	4.7	0
Rougheye Rkfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0
Other Rockfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0
Herring	0	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0
Salmon	0	0	o	0	0	3.2	0	0	0	0	0	0	0	0	0
Sculpins	0	0	0	0	0	0	0	0	29.1	34.3	14.5	9.1	0	0	0
Other Roundfish	6.9	16.2	4.7	0.7	0	0.5	0	0	0.7	1.2	5.6	0	2.7	0.7	2.9
TOTAL ROUNDFISH	37.5	113.9	14.2	62.2	123.2	34.8	13.2	441.4	147.4	66.1	98.5	552.5	269.9	141.6	153.8
TOTALTIOONERION	07.5	110.5	14.2	UL.L	120.2	54.0	10.2	441.4	177.7	00.1	30.5	332.3	203.3	141.0	100.0
Arrowtooth Findr	37.2	107.3	97	339.2	283.1	166.5	415.1	8.2	0	12.7	10.8	4.7	116.8	56.1	181.7
Flathead Sole	90.9	53.6	15.2	67.8	25.7	91.4	118.5	3.3	25	12.7	25.2	512.1	382.8	383.8	229.2
Rock Sole	5.1	53.6	25.5	24.7	0	37.7	0	24.2	58.5	0	0	0	0	0	0
Rex Sole	0	0	0	0	0	43.1	7.3	0	0	0	0	0	0	Ō	Ö
Dover Sole	0	0	0	0	0	0	0	0	0	0	0	0	0	Ō	0
Pac Halibut	2.4	13.5	16.9	22.8	3.7	0.7	2.7	154	0.7	Ō	4.4	1.2	1	0.2	Ō
Starry Flndr	0	34.8	0	0	0	0	0	0	31.4	ō	0	0	ò	0	ō
Yellowfin Sole	12.5	0	0	0	0	0	0	0	242.2	42.9	148.2	146.2	0	9.6	0
Other Flatfish	86.7	193	163.1	Ō	0	16.2	ō	43.3	0	0	0	146.2	138.1	20.1	31.6
TOTAL FLATFISH	234.9	455.8	317.7	454.6	312.5	355.6	543.7	232.9	357.8	68.2	188.6	810.4	638.8	469.8	442.6
Skates	20.6	31.1	4.9	10.3	0	7.1	24.5	0	0	0	0	22.3	30.6	6.1	42.6
Spiny Dogfish	0	0	0	0	0	2.7	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	1	0	0.2	0	0.2	0	0	0	21.6	31.4	56.6	0.5	4.7	4.4	19.8
Red King Crab	Ò	0	0.2	0	0.2	0	o o	0	21.0	4.1	2.9	0.5	0	0	0
Dungeness Crab	0	0	0	0	Ô	0	Õ	0	0	0	0	0	Õ	0	0
Shrimp	0	0	0	0	0	0	0	0	0	0.8	0.7	0	0.	0.7	0.7
Scallop	1.2	1.7	0	0	0.2	0	0	1.4	ő	0.0	0.7	0.7	0	0.7	0.2
Other Inverts	49.5	249.8	43.4	32.1	20.6	18.9	22.3	8.2	0.7	3.3	0	21.8	5.4	0	43.4
TOTAL INVERTS	51.7	251.5	43.4	32.1	21.1	18.9	22.3	9.5	22.3	39.6	60.3	23	10	5.1	64.2
TOTALINVENTO	51.7	201.0	40.0	JZ. 1	£.1.1	10.3	د.ع	3.3	22.3	55.0	00.3	23	10	J. I	04.2
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CATCH (kg/km)m)	344.6	852.3	380.4	559.2	456.8	419.1	603.7	683.9	527.6	173.9	347.3	1408.3	949.3	622.6	703.2
TOTAL OATON (Ng/KIII)III)	344.0		300.4	333.2	430.0	713.1	000.7	000.3	321.0	170.0	U-1.U	1700.3	343.3	UEE.U	100.2

Appendix B. (Page 5 of 20)

Haul	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Location	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD							
Month/Day/Year	6/30/95	7/1/95	7/1/95	7/1/95	7/1/95	7/1/95	7/1/95	7/1/95	7/1/95	7/2/95	7/2/95	7/2/95	7/2/95	7/2/95	7/2/95
Station	KLD	534B	534D	535C	535A	535B	535D	561	560	588	620	655	695	696	656
Longitude Start	152 45.0	152 32.7	152 30.4	152 28.3	152 27.6	152 24.8	152 23.7	152 27.7	152 30.7	152 36.5	152 34.6	152 33.6	152 32.7	152 26.0	152 25.1
Latitude Start	57 16.9	57 11.1	57 8.4	57 7.7	57 10.3	57 9.5	57 8.3	57 5.5	57 3.7	57 0.0	56 54.8	56 51.2	56 45.8	56 45.6	56 50.2
Heading, Degrees	197	3, 11.7	4	12	162	14	356	25	25	180	180	180	205	14	0 30.2
Average Depth (m)	27	99	124	146	139	123	123	154	143	157	154	148	144	177	165
Distance Fished (km)	1.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Bottom Temperature	7.6	5.2	5.1	5.1	5.1	5.2	5.2	5.1	1.9	5.2	5.2	5.2	5.2	5.2	5.2
Bollom Temperature	7.0	5.2	3.1	5.1	5.1	5.2	3.2	5.1	5	5.2	3.2	3.2	5.2	5.2	5.2
							Kilog	rams/Kilom	eter	***					
Pollock	0	49.2	88.4	84.7	160.7	33.1	0	56.1	22.8	0	0	0	0	0	0
Pacific Cod	2.2	6.1	25.5	72.5	97.2	164.6	100.7	6.4	0	0	0	0	0	0	0
Pac Ocean Perch	0	0	0	0	0.5	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	0	0	0	0.2	0.5	0	0	0.5	0	1.7	21.1	1.2	0.5	12	1
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	1.5	0
Other Rockfish	0	0	0	0.5	3.7	0	0	0	0	0	0	0.5	0	0	0.2
Sablefish	0	0	0	0	0	0	0	1.7	0	3.2	0	0	0	17.4	25.2
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0
Sculpins	0	0	5.6	0	0	0	0	0	0	0.2	0	0.2	0.2	0.2	0.5
Other Roundfish	0	1	0	0	0	1	0	17.1	0	3.2	5.9	1.5	1.2	9.1	0.2
TOTAL ROUNDFISH	2.2	57.8	119.5	158	262.6	198.6	100.7	81.8	22.8	8.3	26.9	3.4	2	40.2	27.2
Arrowtooth Findr	4.9	143.5	68.8	287.3	516.5	307.6	372	1137.4	470	22	85.5	116.1	50.5	55.1	108.5
Flathead Sole	3.5	31.4	16.4	18.9	114.9	27.4	71.5	14	32.6	8.3	36.2	19.8	20.1	17.9	9.6
Rock Sole	215.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rex Sole	0	9.1	7.3	0	20.1	25.7	57.3	0	0	0	0	0	0	0	0
Dover Sole	0	31.4	0	18.9	68.8	9.6	14.2	0	0	0	0	16.9	0	0	14.2
Pac Halibut	30.2	17.4	25	32.3	17.1	14	19.8	20.8	10.8	5.9	9.6	0	0	0	13.2
Starry Findr	305.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellowfin Sole	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Flatfish	0	0	0	0	0	0	0	0	0	O	0	0	0	0	0
TOTAL FLATFISH	559.2	232.7	117.6	357.3	737.5	384.3	534.9	1172.2	513.4	36.2	131.3	152.8	70.5	73	145.5
Skates	0	5.1	2.2	8.3	7,1	7.8	1.5	32.3	0.2	9.6	15.2	18.6	8.8	17.6	7.3
Spiny Dogfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
_			_						_						
Tanner Crab	0.3	0.2	2	2.7	4.4	0.7	1.5	0.2	2	6.9	13.7	15.9	21.8	10.8	4.4
Red King Crab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dungeness Crab	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shrimp	0	0	0	0	0	0	0	0	0.5	0	0.5	0.2	1.2	1.2	0.5
Scallop	0	0.2	0	0.2	0	0	0	0.2	0.2	0	0	0	0	0	0
Other Inverts	2.2	49.2	46.5	1.2	0	22	1.7	11.3	6.1	9.1	8.6	18.4	20.8	16.7	3.4
TOTAL INVERTS	3.5	49.7	48.5	4.2	4.4	22.8	3.2	11.8	8.8	15.9	22.8	34.5	43.8	28.7	8.3
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CATCH (kg/km)	565	345.3	287.8	527.8	1011.5	613.5	640.2	1298.1	545.2	70	196.2	209.4	125.2	159.4	188.3

Appendix B. (Page 6 of 20)

Haul	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Location	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD
Month/Day/Year	7/2/95	7/2/95	7/3/95	7/3/95	7/3/95	7/3/95	7/3/95	7/3/95	7/3/95	7/4/95	7/4/95	7/4/95	7/4/95	7/4/95	7/4/95
Station	621	589	559	587	619	654	618A	586	585X	KLI	KLL	533B	533A	KLC	KLB
Longitude Start	152 27.3	152 27.2	152 44.2	152 43.0	152 44.9	152 43.3	152 50.5	152 55,4	153 1.4	152 51.0	152 46.0	152 43.6	152 46.0	152 56.0	152 59.0
Latitude Start	56 54.7	56 59.0	57 5.9	56 59.4	56 55.7	56 51.5	56 56.7	56 57.0	56 57.0	57 14.6	57 12.4	57 9.4	57 7.8	57 17.5	57 18.6
Heading, Degrees	28	20	200	180	205	306	195	33	81	123	300	30	35	153	155
Average Depth (m)	157	137	154	144	132	97	124	128	137	126	132	141	141	91	82
Distance Fished (km)	1.5	1.9	1.9	1.9	1.9	1.9	1.9	1.9	0.6	1.9	1.9	1.9	1.9	1.9	1.9
Bottom Temperature	5.2	5.2	5.2	5.2	5.2	5.5	5. <b>1</b>	5.2	5.2	5.2	1.3	5.2	5.1	5.6	5.7
Bottom Temperature	5.2	5.2	5.2	3.2	5.2	5.5	3.1	5.2	5.2	5.2		5.2	5.1	5.0	5.7
							Kiloo	rams/Kilom							
Pollock	0	396.8	0	0	0	0			0	26.7	49.7	175. <b>1</b>	101.9	50.2	113.9
Pacific Cod	0	3.2	1.7	0		42.4	47.3 0	1.5							
					1.7			4.4	5.7	13	11.5	41.9	17.1	4.4	14.5
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0
Rougheye Rkfish	0	0	3.2	3.7	0.5	0	0	0	0	0	0.2	0	0	0	0.5
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
Sablefish	38.6	1.2	3.9	0	0	0	0	0	0	0	0.7	0.7	2.4	0.5	0
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0
Salmon	0	3.7	0	0	0	0	0	0	0	0	0	0	0	0	0
Sculpins	0.6	0	0	1.2	0.5	0	0	0	0	0	0	0	0	0	0
Other Roundfish	0	0	7.1	8.6	2.2	5. <b>1</b>	0	2.7	0	17.4	23.3	8.6	6.9	0	0
TOTAL ROUNDFISH	39.2	404.9	15.9	13.5	6.9	47.5	47.3	8.6	5.7	57.1	85.5	226.6	128.3	55.1	128.8
Arrowtooth FIndr	100.4	198.4	575.1	126.9	99.2	363.5	117.8	115.6	56.3	103.4	211.4	907.7	509.7	150.9	149.4
Flathead Sole	24.5	66.1	67.1	49	27.7	3.9	76.7	32.3	18.8	30.6	43.6	47.8	101.9	201.1	149.4
Rock Sole	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rex Sole	Ö	143.3	0	Ō	Ö	26	29.4	32.3	14.7	11.5	0	ō	Ö	Ö	0
Dover Sole	9.8	0	0	0	Ŏ	97.2	59	32.3	9.8	0	31.1	ō	0	Ô	Õ
Pac Halibut	12.9	2.9	61.7	35	ő	1.7	0	4.4	0.0	6.4	35.3	6.4	29.4	49.7	19.1
Starry Findr	0	0	0	0	0	0	0	0	0	0.4	0	0.4	23.4	0	0
Yellowfin Sole	0	0	0	0	0	0	0	0	0	0	0	0	0	92.1	15.7
Other Flatfish	0	0	0	0	0	0	0	0	0	0	0	0	0	33.6	12.5
		410.7	703.9	210.9	126.9	492.3	282.9	217	99.6	151.9	321.3	961.8		527.3	346.1
TOTAL FLATFISH	147.6	410.7	703.9	210.9	126.9	492.3	282.9	217	99.0	151.9	321.3	901.0	641	527.3	340.1
Skates	0.3	7.8	48	35.5	8.1	10	5.9	12.2	4.9	9.8	2.4	14.9	10.5	232.9	5.1
	0.3	0.7	0	33.3	0.1	0	0	0	0	0	0	0	0	232.9	0
Spiny Dogfish		0				0			0	0	0		0		0
Other Elasmobrh	0	U	0	0	0	U	0	0	U	U	U	0	U	0	U
Tonner Crab	0.4	0.7	0.0	<i>-</i> 0	0.0	20	4.5	0.7	1.0	0.5	0.5	^	0.7	2.0	0.5
Tanner Crab	2.4	0.7 0	9.6	5.9 0	9.3 0	3.2 0	1.5	0.7 0	1.6 0	0.5 0	0.5 0	0	0.7 0	3.9 0	0.5
Red King Crab	0	=	0	_	_	=	0	-	_	_	_	_	-	_	0
Dungeness Crab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5
Shrimp	0.3	0	1	0	0	0	0	0	0	0.5	0	0	0	0	0
Scallop	0	0.2	0.2	1.5	1	3.4	0.5	0.2	1.6	0	0.2	0.2	0.5	0.5	0.2
Other Inverts	8.6	35.3	21.1	11.8	10.8	20.6	29.4	28.2	18	29.9	151.1	143.3	197.4	62	50.5
TOTAL INVERTS	11.3	36.2	31.8	19.1	21.1	27.2	31.4	29.1	21.2	30.9	151.9	143.5	198.6	66.4	51.7
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CATOLLY, "	400 :	050 =	700 7	076	400.0		007.1	00~	404.4	040.0	504.4	4040.0	070.5	004 7	504.7
TOTAL CATCH (kg/km)	198.4	859.7	799.7	279	162.9	577	367.4	267	131.4	249.6	561.1	1346.8	978.5	881.7	531.7

Appendix B. (Page 7 of 20)

11. 1										400	461	400	400	10:	
Haul	91 E KOD	92 E KOD	93	94 E KOD	95	96 C.E.KOD	97 CEKOD	98	99	100	101	102	103	104	105 S.E.KOD
Location	E.KOD 7/4/95	E.KOD 7/5/95	E.KOD 7/5/95	E.KOD	E.KOD 7/5/95	S.E.KOD 7/5/95	S.E.KOD 7/5/95	S.E.KOD 7/6/95	S.E.KOD 7/6/95	S.E.KOD 7/6/95	S.E.KOD 7/6/95	S.E.KOD 7/6/95	S.E.KOD 7/6/95	S.E.KOD 7/7/95	S.E.KOD 7/7/95
Month/Day/Year				7/5/95											
Station	KLA	KLH	KLG	KLF	KLE	THN	THM	615	651	729	728	761	760	THA	614
Longitude Start	153 4.8	152 55.0	152 59.2	153 3.6	153 8.1	153 20.0	153 22.3	153 24.3	153 15.2	153 11.1	153 19.2	153 17.2	153 26.8	153 42.2	153 27.7
Latitude Start	57 18.3	57 13.8	57 12.5	57 12.2	57 10.9	57 10.1	57 8.2	56 55.0	56 51.1	56 40.1	56 38.9	56 36.8	56 34.5	56 53.4	56 54.5
Heading, Degrees	77	243	237	254	45	190	41	180	157	0	14	270	10	57	0
Average Depth (m)	91	113	119	123	117	110	123	143	174	148	146	141	137	55	141
Distance Fished (km)	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.5	1.9	1.9
Bottom Temperature	2.8	5.4	5.2	5.2	5.3	4.8	4.7	5.1	5	3.6	3.9	3.6	4.4	6.2	4.9
							Kiloa	rams/Kilom	eter						
Pollock	152.8	0	0	63.9	74.9	112.2	75.9	113.4	17.1	5.4	0	39.7	8	0	68.1
Pacific Cod	19.3	15.7	6,6	34.8	27.7	15.9	11.5	4.9	2.4	20.6	9.8	17.1	0	100.4	3.9
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	0.2	0	0	0.5	0	1.2	1	0	2.4	1.7	2.2	2.7	2.8	0	0
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	ō	0	0	0	o	0	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0	4.2	0	2.2	0	0	ō	0	0	0
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	ō	ō	ō	ō	0	ō	0	ō	Ō	0	D	0	0	0	0
Sculpins	38.2	0	0	42.6	0	ō	ō	16.9	0	0	0	0	ō	ō	14.7
Other Roundfish	0	21.3	4.9	4.9	0	1	9.1	2.7	4.2	0.5	Ö	Ö	0.6	12	12.7
TOTAL ROUNDFISH	210.6	37	11.5	146.7	102.6	130.3	101.6	137.9	28.4	28.2	12	59.5	11.3	112.4	99.4
		-				, , , , ,									
Arrowtooth FIndr	20.8	173.2	222.4	192	383.8	916.3	227.8	221.2	200.1	39.7	36.2	98.9	59.1	57.3	160.4
Flathead Sole	215.3	272.1	256.7	142.3	233.9	317.9	271.1	45.3	74.5	62.9	47.3	87.2	110.2	114.4	58.3
Rock Sole	0	0	0	0	0	37.5	0	0	0	0	0	0	0	57.3	0
Rex Sole	0	16.2	0	0	1	0	0	4.2	0	1.2	0	7.1	0	0	0
Dover Sole	0	0	0	0	0	0	0	0	22.8	0	0	0	0	0	19.3
Pac Halibut	0	0	31.8	32.1	0	13	47	13.2	53.1	54.6	26.9	54.4	12.6	15.7	5.6
Starry FIndr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellowfin Sole	27.7	0	8.6	0	0	37.5	0	0	0	0	0	0	0	331.9	0
Other Flatfish	0	0	0	0	0	32.8	130.1	0	0	0	0	0	0	251.8	0
TOTAL FLATFISH	263.8	461.4	519.5	366.4	618.7	1354.9	676	283.9	350.5	158.5	110.5	247.6	181.9	828.3	243.7
01.4		0.0	0.0				44.0		40.7	•				740	
Skates	0	8.3	6.9	9.3	1.7	0	11.3	3.2	13.7	0	0.2	5.1	5.2	74.2	14
Spiny Dogfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	14	1.2	6.4	25.7	19.1	12.2	4.9	5.1	2.2	0.2	0	0.2	0.3	0.7	8.8
Red King Crab	0	0	0	0	0	3.4	2.9	0	0	0	0	0	0	0	0
Dungeness Crab	0	0	0	0	1.2	0.7	0	0	0	0	0	0	0	0	0
Shrimp	0.7	0.7	0.7	0.7	0	0	0	0	0.5	0.2	0.7	0	0.	0	0.5
Scallop	0.2	0.2	0	0	0	0.5	0	0.2	0	0.5	1.2	0.2	0	1.7	0.2
Other Inverts	3.2	43.4	34.3	29.1	Õ	37.5	18.9	22.8	66.1	3.7	74	7.6	4.6	97.5	8.1
TOTAL INVERTS	18.1	45.6	41.4	55.6	20.3	54.4	26.7	28.2	68.8	4.7	75.9	8.1	4.9	99.9	17.6
	10.1			00.0	20.0	04	_0.7		55.0	•••	, 0.0	5.1		55.0	
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CATCH (kg/km)	492.5	552.3	579.2	578	743.3	1539.6	815.6	453.1	461.4	191.3	198.6	320.4	203.3	1114.9	374.7
TO THE OPTION (RIGHTII)	732.0	UUE.U	J, J,L	370	, 40.0	1000.0	0.0.0	100.1	101.7	.51.0	.,,,,,	020.7		,,,,,,,	3, 4.1

Appendix B. (Page 8 of 20)

Incompton   SEKOD	<del></del>		46-			4.50	421		425	424	4.5-	4.10	1.1~	440	410	100
Month/DayYoar   Month/DayYoa	Haul	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
Salton   THIC   THIO   THIO																
Longilus Start   159 301   159 288   158 287   159 288   158 278   159 288   158 287   159 288   158 288	•															
Lathius Clair																
Heading Degrees 0 0 14 196 158 222 90 160 160 0 56 190 117 69 145 Average Depth (m) 132 130 121 1012 113 133 152 155 151 101 1110 110 110 110 110 110 11	5															
Average Depth (m) 132 130 121 102 113 123 152 155 150 150 101 110 91 73 88 bistance Fisher (km) 19 19 19 19 19 19 19 19 19 19 19 19 19																
Distance Fished (km)   1.9   1.5   1.9																
Bottom Temperature						–										
Pollock   86.5   198.9   66.1   70.5   58.5   313.5   0   12.5   2.9   14.5   563.3   83.3   112.2   82.4   129.1     Pacific Cod   5.6   12.7   19.3   222   12.2   10.3   54.1   41.4   14.5   111.5   51.1   32.1   10.3   4.3   41.9     Pac Otean Perch   0   0   0   0   0   0   0   0   0	, ,															
Pollock	Bottom Temperature	4.2	4.2	4.7	4.5	4.6	4.4	4.4	4.4	4.4	4.2	5.1	4.9	5.2	5.2	6.9
Pollock						-**		Kiloo	ırams/Kilom	eter						
Pac Opean Perich	Pollock	86.5	198.9	66.1	70.5	58.5	313.5	-			14.5	563.3	83.3	112.2	82.4	129.1
Roughey Rikfish	Pacific Cod	5.6	12.7	19.3	22	12.2	10.3	54.1	41.4	14.5	11	53.1	13.2	10.3	4.3	• 14.9
Thornyhead Right  O	Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thornyhead Right	Rougheve Rkfish	1.7	0	2.7	0	0	0.5	1	0	2.2	1.7	0	0	0	0	0
Other Rockfish         0	,		0		0	0	0	0	0	0	0	0	0	0	0	0
Sablefish   0	,				0	0			0	0		0		0	0	0
Herring 0 0 0 0 0.2 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0	0	1.2	0	1.2	0	0	0	Ō	0	0	1.2	0	0	0.5
Salmon         0 <td></td> <td>0</td> <td>0</td> <td></td> <td>0</td> <td></td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td></td> <td>0</td> <td>0</td> <td></td>		0	0		0		0	0	0	0	0	0		0	0	
Southins   O   O   27.4   O   O   O   O   O   O   O   O   O	•	0			0		0	0	0	0	0	0	0	0	0	0
Other Roundlish         2.4         9.3         4.2         0         4.2         18.1         18.4         3.7         0.5         0.2         1.5         7.8         0         2.8         0           TOTAL ROUNDFISH         96.3         220.9         121.2         92.6         76.2         342.4         73.5         57.6         20.1         27.4         622.6         130.5         122.5         89.4         144.5           Arrowtooth Findr         222.4         444.5         319.4         392.4         325.5         172.9         436.7         48.5         69.3         50         344.4         209.2         71.3         90         129.1           Flathead Sole         49.5         175.6         286.3         221.4         183.7         172.9         59.5         17.4         16.7         43.6         125.2         124.9         326.2         112.4         101.4           Rock Sole         9.8         0		0	_	_	0	_	_	0	Ō	Ō	0	4.7	25	Ō	0	Ō
TOTAL ROUNDFISH 96.3 220.9 121.2 92.6 76.2 342.4 73.5 57.6 20.1 27.4 622.6 130.5 122.5 89.4 144.5 Arrowtooth Findr 222.4 444.5 319.4 392.4 325.5 172.9 436.7 48.5 69.3 50 344.4 208.2 71.3 90 129.1 Flathead Sole 49.5 175.6 286.3 221.4 183.7 172.9 59.5 17.4 16.7 43.6 125.2 124.9 326.2 112.4 101.4 Flathead Sole 9.8 0 0 0 0 0 0 0 0 0 0 0 47 16.7 0 0 0 27.7 Rex Sole 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	•				_					_				_		
Arrowtooth Findr    222.4   444.5   319.4   392.4   325.5   172.9   436.7   48.5   69.3   50   344.4   208.2   71.3   90   129.1     Flathead Sole   49.5   175.6   286.3   221.4   183.7   172.9   59.5   17.4   16.7   43.6   125.2   124.9   326.2   112.4   101.4     Rock Sole   9.8   0   0   0   0   0   0   0   0   0																144.5
Flathead Sole																
Flock Sole	Arrowtooth Findr	222.4	444.5	319.4	392.4	325.5	172.9	436.7	48.5	69.3	50	344.4	208.2	71.3	90	129.1
Rex Sole	Flathead Sole	49.5	175.6	286.3	221.4	183.7	172.9	59.5	17.4	16.7	43.6	125.2	124.9	326.2	112.4	101.4
Dover Sole	Rock Sole	9.8	0	0	0	0	0	0	0	0	0	47	16.7	0	0	27.7
Pac Halibut         1.7         14         10.5         15.9         5.1         1.2         104.8         10.8         5.9         23.8         25.2         19.6         4.2         10.1         67.1           Starry Findr         0	Rex Sole	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Starry Findr	Dover Sole	0	0	0	0	4.2	0	0	0	0	0	0	0	0	0	0
Starry Findr         0 <t< td=""><td>Pac Halibut</td><td>1.7</td><td>14</td><td>10.5</td><td>15.9</td><td>5.1</td><td>1.2</td><td>104.8</td><td>10.8</td><td>5.9</td><td>23.8</td><td>25.2</td><td>19.6</td><td>4.2</td><td>10.1</td><td>67.1</td></t<>	Pac Halibut	1.7	14	10.5	15.9	5.1	1.2	104.8	10.8	5.9	23.8	25.2	19.6	4.2	10.1	67.1
Yellowfin Sole         0         0         30.1         0         0         0         0         0         0         0         0         152.8         150         0           Other Flatfish         0         0         44.1         0         50         70.3         0         0         0         0         125.2         29.1         0         20.5         0           TOTAL FLATFISH         283.4         634.1         660.3         659.8         568.5         417.3         601         76.7         91.8         117.3         666.9         398.5         554.5         383         325.3           Skates         0         0         0         0         5.1         0         19.3         14.9         1.7         9.8         24.2         1.7         0         7.3         37.7           Spiny Dogfish         0 </td <td>Starry Findr</td> <td>0</td>	Starry Findr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Flatfish         0         0         44.1         0         50         70.3         0         0         0         125.2         29.1         0         20.5         0           TOTAL FLATFISH         283.4         634.1         660.3         659.8         568.5         417.3         601         76.7         91.8         117.3         666.9         398.5         554.5         383         325.3           Skates         0<	,	0	0	0	30.1	0	0	0	0	0	0	0	0	152.8	150	0
TOTAL FLATFISH  283.4  634.1  660.3  659.8  568.5  417.3  601  76.7  91.8  117.3  666.9  398.5  554.5  383  325.3  Skates  0 0 0 0 0 0 0 19.3  14.9  1.7  9.8  24.2  1.7  0 7.3  37.7  Spiny Dogfish  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0	0	44.1		50	70.3	0	0	0	0	125.2	29.1	0	20.5	0
Spiny Dogfish         0         <		-	-								117.3				383	
Spiny Dogfish         0         <	Skates	n	n	n	n	5.1	n	19.3	14 9	17	9.8	24.2	17	n	7.3	37 7
Other Elasmobrh         0																
Tanner Crab 6.6 19.6 11 26.5 29.4 2.2 0.5 0.2 2.2 1.5 0.2 5.4 1.7 6.1 0.2 Red King Crab 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		-														
Red King Crab         0         <	Other Elasmobili	· ·	J	·	Ū	v	Ŭ	Ū	Ū	Ū	Ū	·	Ū	Ū	Ū	•
Dungeness Crab 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Tanner Crab	6.6	19.6	11	26.5	29.4		0.5								
Shrimp         0         0         0         0         0         0         0.7         0         0         0.2         0         0         2.9         0         0           Scallop         0.2         0         0         0         0         0.7         0         0         0.5         0         1         1         0.2         0.3         0           Other Inverts         22.3         32.6         22         0         66.9         49.2         14         7.6         25.7         24.2         0         79.1         39.7         92.5         192.5           TOTAL INVERTS         29.1         52.2         33.1         26.5         96.3         52.2         15.2         7.8         28.4         26         1.2         89.2         44.6         99.5         192.8           Other         0	Red King Crab	0	0	0	-	0	_	_	_	-	-	_		-	_	-
Scallop         0.2         0         0         0         0.7         0         0         0.5         0         1         1         0.2         0.3         0           Other Inverts         22.3         32.6         22         0         66.9         49.2         14         7.6         25.7         24.2         0         79.1         39.7         92.5         192.5           TOTAL INVERTS         29.1         52.2         33.1         26.5         96.3         52.2         15.2         7.8         28.4         26         1.2         89.2         44.6         99.5         192.8           Other         0<	Dungeness Crab	0	0	0	0	0	0	0	0	0	0	0	0		0.6	
Other Inverts       22.3       32.6       22       0       66.9       49.2       14       7.6       25.7       24.2       0       79.1       39.7       92.5       192.5         TOTAL INVERTS       29.1       52.2       33.1       26.5       96.3       52.2       15.2       7.8       28.4       26       1.2       89.2       44.6       99.5       192.8         Other       0	Shrimp	0	0	0	0	0	0	0.7	0	0	0.2	0	0	2.9	0	0
TOTAL INVERTS 29.1 52.2 33.1 26.5 96.3 52.2 15.2 7.8 28.4 26 1.2 89.2 44.6 99.5 192.8  Other 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Scallop	0.2	0	0	0	0	0.7	0	0	0.5	0	1	1	0.2	0.3	0
Other 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Other Inverts	22.3	32.6	22	0	66.9	49.2	14	7.6	25.7	24.2	0	79.1	39.7	92.5	192.5
					26.5	96.3	52.2	15.2	7.8	28.4	26	1.2	89.2	44.6	99.5	192.8
TOTAL CATCH (kg/km) 408.8 907.2 814.6 778.9 746 811.9 709.1 157 142.1 180.5 1315 619.9 721.5 579.2 700.2	Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL CATCH (kg/km)	408.8	907.2	814.6	778.9	746	811.9	709.1	157	142.1	180.5	1315	619.9	721.5	579.2	700.2

Appendix B. (Page 9 of 20)

Haul	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135
		S.W.KOD							S.W.KOD					S.W.KOD	
Location	7/9/95	7/9/95	7/9/95	7/10/95	7/10/95	7/10/95	7/10/95	7/10/95	7/10/95	7/10/95	7/10/95	7/11/95	7/11/95	7/11/95	7/11/95
Month/Day/Year								682B		683B	683D	608X		677X	676X
Station	684C	684A	646D	646B	646A	645B	646C		683A				678X		
Longitude Start	154 19.1	154 18.0	154 21.4	154 23.0	154 26.0	154 30.2	154 26.3	154 30.6	154 27.5	154 22.1	154 22.5	155 7.1	155 10.1	155 19.0	155 29.1
Latitude Start	56 44.1	56 46.3	56 48.2	56 50.3	56 51.1	56 50.4	56 48.1	56 45.8	56 45.2	56 45.7	56 44.2	56 50.6	56 44.7	56 41.9	56 40.2
Heading, Degrees	69	200	36	40	155	180	33	33	33	35	80	150	197	210	190
Average Depth (m)	69	51	53	57	62	64	64	69	66	59	73	99	79	113	210
Distance Fished (km)	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.7	1.7	1.9
Bottom Temperature	7.5	7.3	7.5												
						,	Kiloo	rams/Kilom	eter						
Pollock	0	0	98	38.2	27.7	666.7	213.6	143.3	90.1	663.5	150.1	70.8	256.1	58	19.1
Pacific Cod	42.1	101.2	5.9	5.6	5.1	9.8	0	0	3.7	12.5	15.2	127.6	39.2	18.2	0
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	ō	ō	ō	ō	Ō	0	0	0	0	0	0	0	0	0	7.1
Thornyhead Rkfh	Ö	Ō	ō	Ō	ō	0	0	Ō	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0	Ō	ō	0	0	0	Ō	0	0	7.3	2.7	0
Sablefish	0	Ö	Ö	ő	Ö	ō	ō	0	Ō	ō	0	ō	0	0	0
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	o o	ō	0	ō	0	0	0	0	0	0	0	0	0	0	0
Sculpins	Õ	2.9	0	5.6	0	0	0	Ō	0	0	0	Ō	0	0	Ō
Other Roundfish	2.7	2.4	2	2.2	Ö	ō	ō	0.7	3.4	ō	7.8	Ö	ō	0	0.2
TOTAL ROUNDFISH	44.8	106.5	105.8	51.7	32.8	676.5	213.6	144	97.2	676	173.2	198.4	302.6	78.9	26.5
Arrowtooth Findr	161.2	17.9	23.5	12.7	14	60.5	60.3	143.3	175.1	42.4	200.3	867.3	622.1	1858.4	162.6
Flathead Sole	214.8	57.3	90.1	49	142.3	84.7	104.1	206.7	69.1	183.4	183.7	33.3	18.2	58	28.7
Rock Sole	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rex Sole	0	1.5	0	0	0	0	0	0	0	0	0	30.1	63.4	101.5	0
Dover Sole	0	0	0	0	0	0	0	0	0	0	0	20.1	46.3	58	0
Pac Halibut	107.5	14	44.8	50.7	12	76.7	42.9	52.7	52.2	48.5	87.2	80.3	16.9	0	0
Starry FIndr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellowfin Sole	0	27.7	23.5	0	0	0	0	0	0	10.5	0	0	0	0	0
Other Flatfish	86	16.2	17.1	0	27.7	36.2	5.4	39.7	15.9	17.6	11.8	0	0	0	0
TOTAL FLATFISH	569.4	134.5	199.1	112.4	195.9	258.1	212.6	442.3	312.3	302.5	483	1031.1	766.9	2075.9	191.3
Skates	41.4	31.6	4.9	55.4	93.8	41.1	66.6	15.2	103.8	105.6	24.7	0	7.6	14.2	19.1
Spiny Dogfish	41.4	0	4.5	0	93.0	0	0.00	15.2	0	0	0	0	0.0	0	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	- 0	0	0	0
Other Elasmooni	U	U	U	U	U	U	U	U	U	U	U	.0	U	O	U
Tanner Crab	0	0	0	0.2	0.2	0.5	0.7	0.2	0.2	0	0.2	0.7	0.3	0	1.2
Red King Crab	0	0	0	0	0	0	0	0	0	1.5	0	0	0	0	0
Dungeness Crab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shrimp	0	0	0	0	1	1.2	0	0	0	0	0	0	0.	0	0.2
Scallop	3.7	5.9	3.4	2.2	4.2	0.7	3.4	3.4	2.7	2	1.5	0.2	1.9	0	0
Other Inverts	232.2	4.7	7.3	30.4	8.3	0	11	57.3	47.8	7.1	14.9	203.5	21.5	14.4	0.2
TOTAL INVERTS	235.9	10.5	10.8	32.8	13.7	2.4	15.2	61	50.7	10.5	16.7	204.5	23.7	14.4	1.7
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
									=0.4	1001 -	0077 -		4400.0	0400 :	000.0
TOTAL CATCH (kg/km)	891.5	283.1	320.6	252.3	336.3	978.2	508	662.5	564.1	1094.6	697.5	1434	1100.8	2183.4	238.6

Appendix B. (Page 10 of 20)

Haul	136		138	139	140	141	142	143	144	145	146	147	148	149	150
Location	S.W.KOD		S.W.KOD				S.W.KOD			S.W.KOD				S.W.KOD	
Month/Day/Year	7/11/95	7/11/95	7/11/95	7/12/95	7/12/95	7/12/95	7/12/95	7/13/95	7/13/95	7/13/95	7/13/95	7/13/95	7/13/95	7/13/95	7/13/95
Station	712X	748X	781X	881X	815X	816X	ALB	ALD	ALF	ALH	ALI	ALA	ALC	ALG	ALJ
Longitude Start	155 36. <b>6</b>	155 45.7	155 40.0	155 47.5	155 46.4	155 43.1	154 11.5	154 11.5	154 9.8	154 6.6	154 5.0	154 8.9	154 7.8	154 5.8	154 2.1
Latitude Start	56 39.8	56 34.8	56 30.1	56 15.7	56 20.4	56 20.7	56 50.0	56 52.7	56 51.8	56 53.9	56 54.7	56 46.9	56 49.4	56 51.5	56 53.7
Heading, Degrees	200	162	215	0	60	15	311	182	0	207	205	26	26	27	41
Average Depth (m)	234	234	126	69	73	64	40	55	55	64	77	62	73	62	71
Distance Fished (km)	1.9	1.9	1.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Bottom Temperature															
							·Kilog	rams/Kilom	neter						
Pollock	0	0	0	0	0	0	15.7	712.5	825.9	875.8	584.4	159.9	198.9	402.9	556.5
Pacific Cod	11	4.4	83	103.4	71	11.5	38.7	15.9	13.5	11.5	38.7	21.3	59	8.1	6.6
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	8.8	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sablefish	4.4	8.1	0	0	0	0	0	0	0	0	0	1	2	0	0
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	ō	0	0	0	0	0	ō	0	0	0
Sculpins	0	0	0	ō	0	0	0	0	86	0	34.3	0	Ō	0	0
Other Roundfish	0.7	ō	0	Ô	0	0	0.5	Ö	0	0	4.4	Ö	15.4	Ō	Ö
TOTAL ROUNDFISH	25	13.5	83	103.4	71	11.5	54.9	728.4	925.3	887.4	661.8	182.2	275.3	411	563.1
A Et . I	440.0	405.7	-7-		50.0	45.0	4.0	00.4		•	45.0	05.5	20.7	20.0	40
Arrowtooth Findr	146.2	195.7	575	2	56.8	45.8	4.9	33.1	0	0	45.8	35.5	36.7	20.6	13
Flathead Sole	4.7	8.6	33.2	1.5	72.5	55.4	20.3	116.1	189.3	98.9	114.6	195.4	250.6	299.8	258.9
Rock Sole	0	0	0	0	2.9	8.6	3.2	0	0	0	0	0	0	0	0
Rex Sole	0	0	83	0	2.4	0	0	0	0	0	0	0	0	0	0
Dover Sole	0	20.1	154.8	0	0	0	0	0	0	0	0	0	0	0	0
Pac Halibut	20.3	3.2	30.8	4.7	28.2	13.5	10.3	22.3	22.8	8.1	0	36.7	11	8.8	19.3
Starry Findr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellowfin Sole	0	0	0	0	0	0	35.8	149.2	51.7	56.6	45.8	35.5	7.3	72.3	64.7
Other Flatfish	0	0	0	18.6	18.9	26.7	11	45.6	0	0	0	0	0	0	0
TOTAL FLATFISH	171.2	227.5	876.8	26.7	181.7	149.9	85.5	366.2	263.8	163.6	206.2	303.2	305.7	401.4	355.9
Skates	37	26.2	14.2	0	0	13.2	0	0	0	11.8	12.2	39.9	72.3	6.4	31.6
Spiny Dogfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	1	2.7	0.5	0	0	0	0	0.2	1.5	13	33.3	9.8	60	3.7	2.2
Red King Crab	0	0	0	0	0	0	Ö	0	0	0	0	22	2.2	2.4	1.7
Dungeness Crab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shrimp	0.5	1.5	Ö	Ö	0	Ö	ō	Ö	0	ō	Ö	0	0.	ō	Ō
Scallop	0.0	0	ő	0	ő	0.2	1.2	1.2	1	0	0	Ö	Ö	0.7	Ō
Other Inverts	1.5	0.5	ő	0	20.3	0.2	17.4	1.7	34.3	4.9	0	102.6	11	2.7	15.7
TOTAL INVERTS	2.9	4.7	0.5	0	20.3	0.5	18.6	3.2	36.7	17.9	33.3	134.5	73.2	9.6	19.6
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CATCH (kg/km)	236.1	271.9	974.5	130.1	273.1	175.1	159	1097.7	1225.8	1080.6	913.6	659.8	726.4	828.3	970.1

Appendix B. (Page 11 of 20)

Haul	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165
Location	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	AKUN	AKUN	AKUTAN	AKUTAN	AKUTAN	AKUTAN	AKUTAN	UNALAS.
Month/Day/Year	7/13/95	7/13/95	7/14/95	7/14/95	7/14/95	7/14/95	7/14/95	7/30/95	7/30/95	7/30/95	7/30/95	7/31/95	7/31/95	7/31/95	8/1/95
Station	ALK	ALM	ALR	ALQ	ALP	ALO	ALL	ANA	AND	AKL	AKG	AKA	AKC	AKD	UND
Longitude Start	153 57.7	153 58.3	153 49.9	153 54.4	153 57.4	153 59.5	154 5.1	165 29.9	165 31.5	165 44.7	165 44.4	165 42.1	165 42.7	165 41.9	166 28.6
Latitude Start	56 55.9	56 56.3	57 6.9	57 4.9	57 2.6	56 59.3	56 55.3	54 13.9	54 15.1	54 15.3	54 13.8	54 8.8	54 10.0	54 11.5	53 56.8
Heading, Degrees	69	222	237	225	205	240	43	73	70	350	323	18	327	350	21
Average Depth (m)	68	62	132	172	150	128	86	77	48	102	99	71	79	84	75
Distance Fished (km)	1.1	1.9	1.9	1.9	1.9	1.3	1.7	1.9	1.7	1.9	1.9	1.9	1.9	1.9	1.9
Bottom Temperature								6.2	6.5	6	6	6.9	6.8	6.7	5.6
•															
								rams/Kilom							
Pollock	320	1585.1	109	71	135.9	149.1	274.6	0	0	0	0	0	0	0	0
Pacific Cod	26.5	23.8	16.7	17.6	25	6.3	14.4	7.3	114	4.7	1.5	43.8	20.1	7.8	31.6
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	0	0	0	0	1.2	0	0	0	0	0	0	0	0	0	0
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sablefish	0	0	0	0	6.4	0	0	0	0	0	0	0	0	0	0
Herring	0	0	0.2	0	0	0	0	0	0	0.5	1	0	0.5	0.2	0
Salmon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sculpins	0	38.9	12	0	0.5	4.2	55	49	11.2	7.1	0	12	6.1	3.4	44.1
Other Roundfish	0	0	1	3.7	13	0.7	2.2	49	0.3	3.4	0	0	1.5	1	9.8
TOTAL ROUNDFISH	346.6	1647.8	138.9	92.3	182	160.2	346.2	105.3	125.5	15.7	2.4	55.8	28.2	12.5	85.5
	0,0.0	, , , , , ,	100.0	-2.0			0.10		,						
Arrowtooth Findr	44.5	0	37.5	117.3	114.6	22.7	55	16.4	0	61	237.1	68.1	110.5	134.7	123.7
Flathead Sole	141.2	97.5	51.2	6.1	8.6	120.4	153.8	32.6	0	35.3	21.1	19.3	31.1	0.2	106.1
Rock Sole	0	0	0	0	0	0	0	416.9	71.6	2.9	0	22.8	20.8	20.8	114.9
Rex Sole	0	0	0	0	0	0	0	0	0	35.3	12.7	0	10	0	62
Dover Sole	0	0	0	0	10.5	4.2	0	0	0	0	0	0	0	0	0
Pac Halibut	11.8	17.9	0	0	0	0	3.3	24.7	25.9	21.1	17.1	15.9	27.4	15.9	8.8
Starry Flndr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellowfin Sole	89.4	0	5.1	0	0	0	0	0	0	0	0	9.1	6.6	0	0
Other Flatfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL FLATFISH	287	115.4	93.8	123.4	133.7	147.3	212	490.6	97.4	155.5	288	135.2	206.5	171.7	415.4
701712127111011	20.	1,0.,	00.0	120.1	100	717.0	_,_	100.0					200.0		,,,,,,
Skates	29	29.1	0	0	0	0	0	0	0	2.2	0	0	0	0	0
Spiny Dogfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	0.4	0.5	6.9	8.8	5.6	17.1	31.3	0	0	20.8	10.5	0.5	0	19.3	0.7
Red King Crab	0	0	0	0	0	0.7	0	0	0	0	0	0	0	2.9	0
Dungeness Crab	0	0	0	0	0	0	0.3	0	0	0	0	0	0.	0	0
•	0	0			0		1.1	0	0	0	0	0	0	0	0
Shrimp	_	-	0.2	1.2	_	1.4		_	-	0	0	_	0	_	
Scallop	1.6	0	0	0	0	0	0	1.5	0.8	-		0	-	3.2	0
Other Inverts	0	0	0	5.6	1.5	15.7	29.7	29.4	43	18.6	2.9	77.6	51.2	45.3	22
TOTAL INVERTS	2	0.5	7.1	15.7	7.1	35	62.3	30.9	43.8	39.4	13.5	78.1	51.2	70.8	22.8
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Othor	U	U	U	U	U	U	3	J	0	· ·	Ū	U	V	U	3
TOTAL CATCH (kg/km)	664.6	1792.8	239.8	231.5	322.8	342.5	620.5	626.8	266.7	212.8	303.9	269.2	285.8	255	523.6
															_

Appendix B. (Page 12 of 20)

							180	170		475	470	477	178	179	180
Haul	166	167	168	169	170 UNALAS.	171 UNALAS.	172 BEAVER	173 BEAVER	174 BEAVER	175 BEAVER	176 BEAVER	177 BEAVER	USOF	USOF	USOF
Location	UNALAS.	UNALAS. 8/1/95	8/1/95	UNALAS. 8/1/95	8/1/95	8/1/95	8/2/95	8/2/95	8/2/95	8/2/95	8/2/95	8/2/95	8/3/95	8/3/95	8/3/95
Month/Day/Year	8/1/95	UNC	UNF	UNJ	UNG	8/1/95 KAA	8/2/95 BIB	8/2/95 BID	8/2/95 BIG	8/2/95 BIK	6/2/95 BIN	6/2/93 BIU	USF	USG	USB
Station	UNE					166 19.7	166 30.5	166 26.0	166 23.1	166 20.1	166 11.7	165 58.8	166 40.2	166 37.7	166 42.1
Longitude Start	166 30.2	166 36.1	166 31.3	166 29.9	166 27.0		53 44.2	53 46.6	53 47.7	53 50.4	53 51.8	53 50.0	53 31.4	53 32.4	53 28.3
Latitude Start	53 56.6	53 55.0	53 58.2	54 1.7	53 58.7	53 58.7	53 44.2	60	37	33 30.4	155	353	127	161	333
Heading, Degrees	357	0	26	175	17	50		247	251			102	79	79	108
Average Depth (m)	113	132	146	170	77	77	174			282	232 0.9	1.3	1.9	1.9	1.9
Distance Fished (km)	1.9	1.5	1.9	1.9	1.5	1.3	1.3	1.9 5.3	1.9	1.9 3.9	6.2	6.8	6.3	6.2	5.6
Bottom Temperature	5.4	5.4	5.2	5.2	5.5	6.2	5.6	5.3	4.6	3.9	0.2	0.8	0.3	0.2	5.6
							Kilog	rams/Kilom							
Pollock	101.2	442.1	476.9	661	0	0	340.4	4.4	8.3	8.6	96.5	0	0	26.2	0
Pacific Cod	4.9	2.4	1	9.6	154	19.2	43	15.2	30.9	18.9	50.5	1.7	21.8	17.9	12.5
Pac Ocean Perch	0	3.1	0	0	0	0	2.8	0	0	0	0	0	0	0	0
Rougheye Rkfish	0	0	3.2	0	0	0	1.4	1	0.5	0.7	0	0	0	0	0
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0	0	0.7	0	0	0	0	0	0.3	0	0	0
Sablefish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Herring	0	6.4	0	0	0.9	0	0	0	0	0	0	0	0.2	0.5	0.7
Salmon	0	0	0	0	0	0	0	0	0	0	0	1.7	0	0	0
Sculpins	0	0	0	0	4.3	10.5	1	1.5	0.2	5.6	0	2.8	0	0	0
Other Roundfish	0	11.3	0	0	3.4	0	2.1	1.5	1	1	1.5	5.2	0	1	3.4
TOTAL ROUNDFISH	106.1	465.4	481	670.6	162.6	30.4	390.8	23.5	40.9	34.8	148.4	11.9	22	45.6	16.7
Arrowtooth Findr	266.7	240	134.5	396.5	53	109.2	152.2	50.7	22.8	14.9	136.2	0	1415.4	508	283.1
Flathead Sole	137.9	101	183.4	0	50.5	7	134.4	38.7	27.9	30.9	8.3	0	14.2	26.2	32.6
Rock Sole	0	0	0	0	62.5	37.4	0	0	0	0	4.4	2.4	49	19.6	12.7
Rex Sole	128.8	0	195.7	82.5	7.3	0.3	0	0	1.2	0	2.9	0	0	0	0
Dover Sole	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pac Halibut	6.1	52.7	12.2	13	9.2	26.6	0	0	1.5	12	0	66.5	10	35	3.7
Starry Findr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellowfin Sole	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Flatfish	0	214.6	207.9	0	0	0	0	0	0	0	0	0	22.5	0	0
TOTAL FLATFISH	539.6	608.3	733.8	492	182.5	180.5	286.6	89.4	53.4	57.8	151.9	68.9	1511.2	588.8	332.1
Skates	0	0	0	0	0	0	0	2.2	2.9	15.9	0	0	0	3.9	8.3
Spiny Dogfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	Ō	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	4	1.8	1	2	0.3	0	5.9	6.9	15.7	4.7	1.5	0.3	0	0.2	4.9
Red King Crab	0	0	i	0	0.3	0	0	0.3	0	0	0	0.5	0	0.2	0
•	0	0	0	0	0	0	0	0	0	0	0	Ö	Ö	0	Ö
Dungeness Crab	0	0	0	0	0	0	1.7	0.2	0.7	0.7	0	0	0.	0	0.5
Shrimp	0	0.3	0	0	0	0.3	0	0.2	0.7	0.7	0.5	0	0	0	0.7
Scallop Other Investe	_		_	0			12.9	1	4.4	10.3	4.9	183	20.8	1.7	2.7
Other Inverts	18.4	83.3	8.8	2	13.5	4.2	20.6	8.1	20.8	15.7	4.9 6.9	183.3	20.8	2	8.8
TOTAL INVERTS	19.3	85.4	10.8	2	13.8	4.5	20.0	0.1	20.8	15.7	6.9	103.3	20.0	۷	6.6
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CATCH (kg/km)	665	1159.1	1225.6	1164.6	358.8	215.5	698	123.2	118.1	124.2	307.1	264.2	1554	640.2	365.9

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Appendix B. (Page 13 of 20)

Haul	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195
Location	USOF	USOF	C. IDAK	C. IDAK	C. IDAK	PUMIS.		Makushin		Makushin				Makushin	
Month/Day/Year	8/3/95	8/3/95	8/4/95	8/4/95	8/4/95	8/4/95	8/4/95	8/4/95	8/4/95	8/5/95	8/5/95	8/5/95	8/5/95	8/5/95	8/5/95
,	USA	USC	IDK	6/4/93 IDG	IDH	PUA	PUB	MKP	MKN	MKB	MKC	MKE	MKF	MKJ	MKK
Station															
Longitude Start	166 46.9	166 40.4	167 38.5	167 40.9	167 36.6	167 2.6	167 9.1	167 3.4	167 6.8	166 47.2	166 51.3	166 56.0	167 0.7	167 6.4	167 11.6
Latitude Start	53 32.7	53 26.9	53 28.8	53 31.0	53 31.3	53 31.8	53 32.5	53 38.8	53 40.8	53 42.1	53 43.0	53 43.9	53 44.3	53 43.2	53 43.3
Heading, Degrees	158	44	192	150	145	89	323	297	165	317	282	270	240	85	105
Average Depth (m)	121	102	124	91	73	77	68	119	126	95	179	196	188	128	112
Distance Fished (km)	1.5	1.1	1.9	1.9	1.9	1.9	1.9	1.9	1.5	1.1	1.9	1.9	1.9	1.7	1.9
Bottom Temperature	5.4	5.8	5.1	5.4	5.8	3.4	6.5	5.6	5.5	4.7	4.1	4.1	4.1	4.3	5.1
							Kilog	rams/Kilom	eter						
Pollock	308.9	0	0	0	0	35.3	0	770.8	104.4	649.5	100.4	40.4	36.7	73.5	0
Pacific Cod	33.7	0	57.1	14.5	0	12.2	5.4	8.8	6.4	3.3	4.9	0	4.9	59.3	0.5
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0.5	0	0	0	0
Rougheye Rkfish	0.6	0	0	0	0	0	0	0	0.6	0	0.7	2.7	2.9	0	0
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0	0	0.5	0	0	0	0	0.7	0	0	0	0
Sablefish	0	0	0	0	0	0	0	0	0	0	0.7	1.5	1.7	0	0
Herring	0	0	0	0	0	0	0	0.2	0.3	0	0	0	0.2	0	0.2
Salmon	0	0	0	Ó	0	0	0	0	0	0	0	0	0	0	0
Sculpins	0	0.4	0	12	0	0	0	41.4	0	0	0	0	0	0	0
Other Roundfish	0	0	Ö	0	0	0	0.2	0	ō	Ō	0	0.7	0	5.2	Ō
TOTAL ROUNDFISH	343.2	0.4	57.1	26.5	Ō	48	5.6	821.2	111.7	652.7	108	45.3	46.5	138	0.7
Arrowtooth FIndr	192	88.2	822.7	4.7	3.9	35.3	58.3	96.3	118.8	129.8	138.9	47.5	101.9	101	42.9
Flathead Sole	75.3	2.4	0	0	9.6	28.2	58.3	68.8	25.1	324.9	262.6	139. <b>1</b>	142.8	22.9	34.3
Rock Sole	0	5.7	31.1	38	76.2	0	30.6	0	0	0	0	0	0	0	4.4
Rex Sole	0	1.2	37.5	0	18.6	4.7	11.5	0	0	0	2.2	4.7	10.5	119.5	36.5
Dover Sole	0	0	0	0	0	0	0	0	0	0	0	0	20.3	25.3	0
Pac Halibut	0	7.3	20.8	225.1	82	0	11.3	11.8	34	0	0	0	9.8	3.3	2.7
Starry FIndr	0	0	0	0	0	0	0	0	0	0	٥	0	0	0	0
Yellowfin Sole	0	0	0	0	0	18.9	5.4	0	0	0	0	0	0	0	0
Other Flatfish	0	0	0	0	0	7.1	30.6	0	0	0	0	0	0	0	0
TOTAL FLATFISH	267.3	104.9	912.1	267.7	190.3	94.1	206	176.8	177.9	454.7	403.6	191.3	285.3	271.9	120.7
Skates	2.8	18	6.9	19.8	1.2	0	13.2	7.3	0	0	1.7	0	1.7	0.8	1.5
Spiny Dogfish	2.0	3.3	0.9	19.0	0	0	0	7.5	0	0	0	0	0	0.0	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobin	U	U	U	v	U	U	U	U	U	U	U	U	U	U	U
Tanner Crab	5.5	0.4	0.2	0	0.2	3.4	2.9	7.6	5.2	13.5	2.4	3.9	5.4	8.0	9.6
Red King Crab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dungeness Crab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shrimp	1.5	0	0	0	0	0.2	0	0	0	0	0	0.2	0.5	1.9	0.2
Scallop	0	0	0	2	0.7	0.2	0.2	0	0	0	0	0	0	0	0
Other Inverts	20.8	11	49.7	5.1	3.4	9.3	15.4	3.4	2.8	0	0.7	0.2	2.9	7.1	9.3
TOTAL INVERTS	27.9	11.4	50	7.1	4.4	13.2	18.6	11	8	13.5	3.2	4.4	8.8	9.8	19.1
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CATCH (kg/km)	641.1	138	1026	321.1	195.9	155.3	243.5	1016.4	297.6	1120.9	516.5	241	342.4	420.5	142.1

Appendix B. (Page 14 of 20)

Haul	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210
Location	IVANOF	IVANOF	IVANOF	IVANOF	IVANOF	IVANOF	IVANOF	MITROF.	MITROF.	MITROF.	MITROF.	MITROF.	MITROF.	CHIGNIK	CHIGNIK
Month/Day/Year	8/9/95	8/9/95	8/9/95	8/9/95	8/9/95	8/9/95	8/9/95	8/10/95	8/10/95	8/10/95	8/10/95	8/10/95	8/10/95	8/11/95	8/11/95
Station	4008	4007	4000	4900	400X	4915	4024	4035	4049	4065	4064	4063	4048	4265	4964
Longitude Start	159 25.5	159 25.0	159 28.7	159 29.5	159 29.6	159 11.0	159 3.9	158 50.4	158 47.2	158 34.1	158 35.6	158 35.0	158 38.1	158 18.1	158 20.8
Latitude Start	55 43.6	55 46.4	55 46.7	55 53.3	55 49.5	55 51.7	55 53.4	55 57.0	55 55.8	55 56.0	56 0.0	56 7.9	56 3.6	56 11.5	56 13.5
Heading, Degrees	353	68	184	230	153	219	135	95	115	0.00	340	220	180	28	102
Average Depth (m)	101	80	77	33	68	64	97	141	139	102	155	150	168	55	68
	1.9	1.9	1.9	0.9	1.9	1.9	1.9	1.9	1.9	1.9	1.5	1.9	1.9	1.5	1.9
Distance Fished (km)	6.7	6.4	6.3	7.6	5.5	7.2	6.5	6.3	6.3	6.1	4.9	4.5	4.8	7.5	7.2
Bottom Temperature	0.7	0.4	0.3	7.0	5.5	1.2	0.5	0.5	0.5	0.1	4.5	4.5	4.0	7.5	7.2
								rams/Kilom							
Pollock	38.5	316.2	149.9	31.4	166.5	622.1	53.4	62.7	42.9	0	721.6	396.5	100.4	124.3	48.2
Pacific Cod	0	8.3	54.1	2.9	13.7	12	27.7	7.8	7.6	214.1	22	55.6	36.7	18.4	54.1
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	1	0	0	0	0	0	0	0.5	0.7	0	7.3	2.2	0.2	0	0
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0	0	0	0	0	0	0	0	0.5	0	0	0
Sablefish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sculpins	0	0	13.7	0	0	0	0	28.4	2.2	0	0	0	0	0	13.5
Other Roundfish	1	0	7.1	3.9	0	0	5.4	0	7.6	0	0	0	2	0	1.7
TOTAL ROUNDFISH	40.4	324.5	224.8	38.2	180.3	634.1	86.5	99.4	61	214.1	751	454.8	139.4	142.7	117.6
Arrowtooth Findr	115.4	70.3	68.1	8.8	33.3	202.6	92.3	74	107	654.2	77.2	66.1	26.7	83	112.4
Flathead Sole	139.4	87.9	54.6	115.6	366.6	130.3	145.7	108	128.6	16.4	128.9	352.4	261.1	289.9	64.2
Rock Sole	8.6	07.5	0	0	36	0	19.3	0	0	37.5	0	0	0	0	0
Rex Sole	1	0	0	0	0	Ő	0	3.4	Ő	0	0	0	0	0	0
Dover Sole	0	0	0	0	0	ő	ŏ	0.7	0	ő	0	Õ	0	0	0
Pac Halibut	9.8	27.4	13.7	3.9	25.7	12.2	20.6	2.4	7.6	41.6	15.6	5.4	0	6.4	25
Starry Findr	0	- 0	0	0.5	0	0	0	0	0	0	0	0.1	0	79.3	0
Yellowfin Sole	14	79.1	95.5	172.9	177.8	57.8	10.3	0	0	0	0	Õ	0	374.1	112.4
Other Flatfish	0	73.1	21.1	35.3	0	0	0	ő	Ö	0	ő	ő	0	48.4	0
TOTAL FLATFISH	288	264.8	253	336.5	639.5	402.9	288.3	187.9	243.2	749.7	221.7	424	287.8	881.1	314
01 .					0	11.5	17.1	1.0	18.6	5.1	6.4	0	0	124.6	107.8
Skates	0	0	0	0	0	11.5	17.1	1.2						124.0	0 .0
Spiny Dogfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	U	U	U	U
Tanner Crab	0.5	0.5	0.2	0.5	13.2	0.2	0.2	0.2	0.2	0	0	13	4.7	0.3	0.7
Red King Crab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dungeness Crab	0	0	0.7	30.4	0	0	0	0	0	0	0	0	0	0.6	152.8
Shrimp	0.5	0	0	0	0	0	0	1.2	0.5	0	0	0	4.7	0	0
Scallop	0.5	1.7	2.2	0	0	1.7	1	0	0	0	0	0	0	0	1.2
Other Inverts	4.2	38.5	19.1	3.9	0	21.8	5.1	66.1	31.1	2.4	12.9	0	24.7	30.9	15.9
TOTAL INVERTS	5.6	40.7	22.3	34.8	13.2	23.8	6.4	67.6	31.8	2.4	12.9	13	34	31.8	170.7
Other	0	0	0	24.5	0	0	0	0	0	0	0	0	0	0	0
TOTAL CATCH (kg/km)	334.1	629.9	500.1	434	833	1072.3	398.2	356.1	354.6	971.4	991.9	891.8	461.2	1180.2	710
TOTAL OATOIT (Ng/KIII)	007.1	020.0	300.1	-101		.0, 2.0	000.E	000.1							

Appendix B. (Page 15 of 20)

													•		
Haul	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225
Location	CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK	#CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK	KUJULIK	KUJULIK	KUJULIK
Month/Day/Year	8/11/95	8/11/95	8/11/95	8/11/95	8/11/95	8/11/95	8/11/95	8/12/95	8/12/95	8/12/95	8/12/95	8/12/95	8/12/95	8/12/95	8/12/95
Station	4264	4271	4270	4312	4278	4277	4274	4256	4266	4267	4272	4282	4298	4301	4302
Longitude Start	158 16.5	158 13.5	158 11.5	158 9.3	158 2.3	158 3.0	158 6.9	158 19.9	158 12.2	158 9.8	158 5.8	157 59.0	157 45.3	157 40.9	157 40.8
Latitude Start	56 13.4	56 13.7	56 14.8	56 15.3	56 23.7	56 25.0	56 24.3	56 25.2	56 25.2	56 24.1	56 29.4	56 25.2	56 32.0	56 33.6	56 32.1
Heading, Degrees	30	47	58	66	323	340	270	90	90	320	160	90	76	199	108
Average Depth (m)	73	91	97	126	192	177	172	93	154	126	99	192	88	93	99
Distance Fished (km)	1.9	1.9	1.9	1.3	1.9	1.9	1.9	1.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Bottom Temperature	7.1	6.9	7	6.9	5.2	5.2	5	5.7	5.2	5.1	6.8	5.2	7.2	7	6.6
- street remperature		5.0		0,4	0,2	0.2	·	•		•				•	
							Kilog	rams/Kilom	eter						
Pollock	41.6	122.5	53.6	209.9	67.4	19.3	54.9	62.9	72.5	95.5	231.7	119.5	31.6	217.2	55.6
Pacific Cod	10.3	7.1	16.2	11.2	52.7	14	98.9	13.9	37	16.7	13	36.2	0	11.5	7.8
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	0	0	0.2	0	0.7	0.7	1.5	0	0	1.2	0.5	0	0	0	0
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0.5	0	0	0	0	0	0	0	0	0	0	0	0
Sablefish	0	0	0.7	0	0	0	0	0	0	0	2.4	0	0	0	0
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	o o	0	0	ō	0	0	Ō	Ō	0	0	0	0	0	0	Ō
Sculpins	0	1.7	0	Ö	0	ō	12.2	0	0	0	0	Ō	ō	Ō	ō
Other Roundfish	2.7	2	ő	ŏ	ŏ	ō	0	7.9	Ō	0.7	1.5	Ō	1.5	0	ō
TOTAL ROUNDFISH	54.6	133.2	71.3	221.1	120.7	34	167.5	84.6	109.5	114.1	249.1	155.8	33.1	228.8	63.4
	•														
Arrowtooth Findr	263.8	167.8	225.1	218.3	209.7	333.8	233.4	135	274.1	254.7	278.2	195.2	133	144.7	288.5
Flathead Sole	402.7	154.8	364.4	151.2	149.9	128.3	68.6	323.6	257.9	262.8	540.8	107	259.6	615.7	377.4
Rock Sole	0	0	16.2	0	0	0	0	18	0	0	0	0	0	0	0
Rex Sole	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
Dover Sole	0	0	0	0	0	0	0	0	0	0	0	31.4	0	0	0
Pac Halibut	3.4	27.7	15.9	14.3	12.7	59.8	19.1	11.7	18.4	10	36.5	4.4	15.9	15.4	47.3
Starry Findr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellowfin Sole	97.2	0	0	0	0	0	0	16.1	0	0	0	0	0	0	0
Other Flatfish	0	0	Õ	Õ	Õ	0	0	35.9	0	0	0	44. <b>1</b>	0	0	0
TOTAL FLATFISH	767.1	350.2	621.6	383.8	372.3	521.9	321.1	540.2	550.3	529.5	855.5	382.1	408.5	775.9	713.2
Skates	14.7	55.1	78.9	73.8	0	18.1	0	90.6	9.8	0	54.6	11.8	62.2	27.7	9.3
Spiny Dogfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab		1.7	0.5	88.5	15.2	15.9	22	0.3	3.7	0.2	0.2	10.5	0	0.2	0
	1		0.5			15.9	0	0.3	3.7 0	0.2	0.2	0.5	0	0.2	0
Red King Crab	_	0	0	0	0	_	-	2.7	_	0	0	0	0	0	-
Dungeness Crab	0.7	39.7	1	0	0	0	0		0	2	_	2	-	0	0
Shrimp	1.5	1.2	1	2.1	3.4	3.2	1.5	0.8	3.9		0		0.		1.2
Scallop	0	0.5	0	0	0	0	0	0	0	0	0.2	0	0	2.2	3.9
Other Inverts	106.8	2.7	1	6.6	0	3.2	4.2	2.7	0	5.4	7.8	0	7.8	3.7	3.9
TOTAL INVERTS	110	45.8	3.4	97.3	18.6	22.3	27.7	6.5	7.6	7.6	8.3	12.5	7.8	6.1	9.1
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CATCH (kg/km)	946.4	584.4	775.2	776.1	511.6	596.4	516.3	722	677.2	651.2	1167.5	562.1	511.6	1038.5	795

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Appendix B. (Page 16 of 20)

Haul	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240
Location	KUJULIK	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.						
Month/Day/Year	8/12/95	8/22/95	8/22/95	8/22/95	8/22/95	8/22/95	8/22/95	8/22/95	8/22/95	8/23/95	8/23/95	8/23/95	8/23/95	8/23/95	8/23/95
Station	4296	222	223	224	199	200	174	173	172	171	171X	171Y	198	147	146
Longitude Start	157 46.3	154 15.4	153 55.7	153 49.5	153 48.3	153 38.4	153 38.8	153 48.9	154 1.7	154 15.3	154 11.6	154 5.7	153 55.2	153 29.9	153 39.7
•	56 37.3	58 10.0	58 9.3	58 9.2	58 14.4	58 14.9	58 17.8	58 18.7	58 17.2	58 18.3	58 19.5	58 19.1	58 13.7	58 23.1	58 22.5
Latitude Start						7 7	17	35	22	61	74	100	35	27	28
Heading, Degrees	160	110	51	55	35				137	112	104	82	218	181	174
Average Depth (m)	73	73	205	196	198	181	179	205 1.9		1.5		1.3	1.9	1.9	1.9
Distance Fished (km)	1.9	1.9	1.9	1.9	1.9	1.9	1.9		1.9	7.4	1.9	7.6	1.9	5	4.9
Bottom Temperature	8.4	7.9	5	4.9	4.9	4.9	4.9	5	5.1	7.4	7.5	7.0	5	5	4.9
								rams/Kilome							
Pollock	71.5	15.7	0	40.2	43.6	50.7	16.7	0.2	0	94.9	40.9	38.5	18.6	17.6	39.2
Pacific Cod	18.4	15.2	0	7.8	13	7.3	17.9	0	72	21.7	6.9	39.2	2	7.1	0
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	0	0	1.7	3.2	1.2	0	0	0.7	0.7	0	0	0	0.7	0	0
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0	0	0	. 0	0	2.7	0	0	0	0	0	0
Sablefish	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	2.2	0	0	0	0	0	0	0	0	0	0
Sculpins	143.3	0	2.2	1.5	2.2	0	0	0.5	0.2	0	0	0	0	0	0
Other Roundfish	0	5.6	0.2	0	0	0.7	0.5	1.5	0.2	0	1.2	3.1	1.7	0	0.5
TOTAL ROUNDFISH	233.4	36.5	4.2	52.7	62.2	58.8	35	2.9	75.9	116.6	49	80.8	23	24.7	39.7
Arrowtooth Findr	35.8	93.8	100.2	136.2	90.1	130.5	59.3	87.7	18.9	0	14.9	17.8	57.3	154.1	203.5
	35.6 357.8		17.1	37.2	35	61.7	27.7	4.9	14.7	176.3	86	79.4	5.4	2.2	3.7
Flathead Sole		117.3			35 0			4.9		0	0	79.4 9.1	0	0	0
Rock Sole	0	7.8	0	0	-	0	0	_	0	0	0	9.1	0	0	
Rex Sole	0	0	0	0	0	0.2	0	0	-	-				0	0.2
Dover Sole	0	7.8	0	0	0	0	2.2	0	3.4	0	1	1.7	0	_	1.2
Pac Halibut	35.8	36.7	8.8	4.7	38.2	14.5	0	2.4	0	0	7.8	26.9	3.9	5.4	7.6
Starry Findr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellowfin Sole	17.9	9.8	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Flatfish	0	7.8	0	0	0	0	0	0	0	0	0	2.8	0	0	0
TOTAL FLATFISH	447.2	281.2	126.1	178.1	163.4	207	89.2	95	37	176.3	109.7	137.9	66.6	161.6	216.3
Skates	46.3	37.5	37	21.3	12.2	12.5	32.8	36	24.5	58.2	9.6	85.4	77.9	10.5	27.2
Spiny Dogfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	1	0	1.7	2.9	2.4	0.5	2	6.4	5.1	0	77.2	0	2.2	4.9	8.3
Red King Crab	0	0	0	0	0	0.0	0	0.1	0	2.8	0	Ö	0	0	0
Dungeness Crab	1.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shrimp	1.7	0.5	0.7	3.9	2.4	3.4	2.2	2.4	0.2	4.6	4.4	0.3	1	1.5	4.4
Scallop	0.5	1.2	0.7	0	2.4	0	0	2.4	1.2	0.3	0	2.4	Ö	0	1.2
Other Inverts	68.8	5.4	21.1	12.7	15.9	2	13.7	6.6	11.8	22.7	11.3	17.5	43.1	4.7	7.6
				12.7	20.8	5.9	17.9	15.4	18.4	30.3	92.8	20.3	46.3	11	21.6
TOTAL INVERTS	73	7.1	23.8	19.6	20.8	5.9	17.9	15.4	10.4	30.3	92.8	20.3	40.3	11	21.0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CATCH (kg/km)	799.9	362.2	191	271.6	258.6	284.1	174.9	149.4	155.8	381.5	261.1	324.3	213.8	207.9	304.7

Appendix B. (Page 17 of 20)

Haul	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255
Location	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	W.KOD
Month/Day/Year	8/23/95	8/23/95	8/24/95	8/24/95	8/24/95	8/24/95	8/24/95	8/24/95	8/24/95	8/24/95	8/24/95	8/25/95	8/25/95	8/25/95	8/25/95
Station	117	145	144	118	90	91	60	61	31	2	3	121	120	119	PAA
Longitude Start	153 46.8	153 49.3	153 56.9	153 40.9	153 31.4	153 24.0	153 20.5	153 14.9	153 13.2	153 12.3	153 2.0	153 10.7	153 17.1	153 29.0	152 57.0
Latitude Start	58 27.0	58 25.7	58 26.6	58 27.9	58 32.6	58 34.5	58 37.7	58 39.2	58 42.7	58 47.1	58 49.2	58 29.3	58 29.8	58 28.4	58 18.0
Heading, Degrees	53	212	62	59	56	45	53	37	30	359	180	212	210	202	327
Average Depth (m)	124	124	88	141	123	133	126	155	157	137	148	170	172	146	117
Distance Fished (km)	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.5	1.9	1.9	1.9	1.9	1.3
Bottom Temperature	6	6	7.6	5	6.6	6.6	6.7	4.9	5.2	6	6.1	4.9	4.9	4.9	6.5
							Vilog	rams/Kilome	ata.						
Pollock	0	0	0	19.6	7.8	9.6	Kilogi 0	0 ams/Niom	11.8	35.5	13	14	16.2	8.3	127.4
Pacific Cod	2	0.2	7.3	0	0	2	1.5	0	1.2	16.8	2.2	9.1	0	0	0
Pac Ocean Perch	0	0	0	0	0	0	0	Ō	0	0	0	0	ő	Õ	Ō
Rougheye Rkfish	0	0	0.2	ō	Ö	Ö	Ö	ō	ō	ō	8.1	ō	Õ	ő	0
Thornyhead Rkfh	0	0	0	0	0	0	0	ō	Ő	0	0	0	0	0	Õ
Other Rockfish	0	Ö	0	Ő	0	0	ő	Õ	0	Ö	0	0	o O	Ő	0
Sablefish	0	Ö	Õ	Ô	ő	Ő	Õ	Õ	0	Õ	0	0	0	0	ő
Herring	0	0	0	0	0	0	0	ő	0	0	0	Õ	0	0	0
Salmon	ő	0	0	Ő	ő	0	0	Ö	0	0	0	Ö	0	0	0
Sculpins	0.2	5.6	7.3	Õ	0.2	ō	Ö	1.7	ŏ	Ö	1	ō	0	0.7	Ő
Other Roundfish	4.4	2.4	4.9	3.4	3.4	3.7	1	0.5	0.2	0.6	0.5	Õ	1	5.9	5.2
TOTAL ROUNDFISH	6.6	8.3	19.8	23	11.5	15.2	2.4	2.2	13.2	53	24.7	23	17.1	14.9	132.6
101/12110011011011	0.0	0.0				10.2							****	11.0	102.0
Arrowtooth Findr	101.9	60.7	161.4	109.5	95.3	123.9	157.7	32.3	38	9.2	88.4	121.7	198.1	165.6	308.3
Flathead Sole	26	83.3	484	11.8	38.9	38	24.7	8.3	23.8	37.4	26	21.1	13	25.2	116.9
Rock Sole	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rex Sole	0	0	0	0	0	0	0	0.2	1.2	0	0	0	0	0.2	0
Dover Sole	2	0	0	0	0	7.6	0	4.2	4.7	9.2	0	0	0	7.1	0
Pac Halibut	0	25	33.6	7.8	13.2	8.6	5.4	2.9	5.6	0	7.6	13.7	2.7	2.4	0
Starry Findr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellowfin Sole	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Flatfish	0	0	86.9	0	0	0	0	0	0	0	0	0	0	0	42.3
TOTAL FLATFISH	129.8	169	765.9	129.1	147.4	178.1	187.9	48	73.2	55.7	122	156.5	213.8	200.6	467.5
Claster	4.4	40.0	105.0	14.0	10.0	00.4	0.0	10.5	10.0	00.0	10.5	00.0	00	4.0	0.4
Skates	14	19.6	105.3	14.9	12.2	28.4	2.9	12.5	12.2	26.9	12.5	22.3	26	4.9	9.4
Spiny Dogfish	0	0	0 0	0	1.7	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	U	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	0.7	0.2	0	0.7	0.2	0.2	0.2	0.7	0.2	0.3	0.2	3.7	1.5	1.2	38.8
Red King Crab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dungeness Crab	0	0	0.2	0.2	0	0	0	0	0	0	0	0	0	0	0
Shrimp	2.2	2	12.2	1.2	1.5	1.5	0.7	1.2	0.2	1.8	0.7	1	3.2	3.9	1
Scallop	18.6	16.9	4.2	24	17.1	12.5	7.3	2	7.8	0.9	0.5	0.2	3.2	23.3	2.8
Other Inverts	7.1	4.4	57.1	2.9	2.2	2.7	0.7	35.5	6.4	14.7	22.3	8.3	6.4	3.9	35
TOTAL INVERTS	28.7	23.5	73.7	29.1	21.1	16.9	9.1	39.4	14.7	17.8	23.8	13.2	14.2	32.3	77.7
, o a miremio	<b>40.7</b>	20.0		20.1	- 1.1	10.0	Ų. i	QG. ¥		,,,,	20.0	10.2		Ų <u>L</u> .0	
Other	0	0	8.6	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CATCULIUM (Inc.)	470	000.4	070.0	100.0	104	000.0	000.0	100 1	110.4	150.4	400	015	074 4	050.0	607.0
TOTAL CATCH (kg/km)	179	220.4	973.3	196.2	194	238.6	202.3	102.1	113.4	153.4	183	215	271.1	252.8	687.2

Appendix B. (Page 18 of 20)

Haul	256	257	258 W KOD	259 W KOD	260	261	262	263	264	265	266	267	268	269	270
Location	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD
Month/Day/Year	8/25/95	8/25/95	8/26/95	8/26/95	8/26/95	8/26/95	8/26/95	8/26/95	8/26/95	8/26/95	8/26/95	8/26/95	8/27/95	8/27/95	8/27/95
Station	MAA	RAA	KUYX	KUY	KUN	KUO	KUP	KUQ	KUS	KUT	KUU	KUV	KUW	KUX	UYBX
Longitude Start	153 5.2	153 12.4	153 12.8	153 11.7	153 22.8	153 24.0	153 26.8	153 31.9	153 32.9	153 31.2	153 30.3	153 31.6	153 31.5	153 22.7	154 0.1
Latitude Start	58 13.0	58 8.0	57 44.5	57 46.6	57 50.3	57 50.6	57 51.5	57 53.7	57 52.5	57 49.7	57 47.4	57 44.4	57 41.2	57 44.2	57 44.5
Heading, Degrees	285	317	17	0	116	300	297	145	137	169	169	3	343	0	147
Average Depth (m)	137	106	27	69	117	139	155	183	183	183	166	88	69	102	141
Distance Fished (km)	1.9	1.9	1.7	1.9	0.9	1.9	1.9	1.9	1.9	1.9	1.5	0.9	1.9	1.7	1.9
Bottom Temperature	6.5	7.2	10.1	8.8	5.7	5.5	5.5	5.4	5.4	5.3	5.4	6.3	6.9	5.2	6.3
							Kilog	rams/Kilom	eter						
Pollock	86.7	273.1	16.6	12.5	32.3	77.6	237.8	693.9	108.7	173.2	75	56.8	423.7	260.7	609.1
Pacific Cod	4.9	0	2.2	0	7.8	25.2	7.8	36	99.4	51.9	5.5	9.8	0	17.1	1.5
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	1.2	0	0	0	0	0	0	0	1.2	0.2	0	0	0	0.5	0
Sablefish	0	0	1.1	0.5	0	0	0	0	0	0	0	2.9	0.7	0.8	0
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sculpins	28.9	0	0	0	0	14.5	31.6	2.9	0.5	0.5	0	0	1.7	2.7	0
Other Roundfish	0.7	0	0.3	3.4	14.7	7.3	3.9	0	1.2	3.9	1.5	3.4	4.2	17.1	0
TOTAL ROUNDFISH	122.5	273.1	20.1	16.4	54.9	124.7	281.2	732.8	211.1	229.7	82	73	430.3	299.1	610.6
Arrowtooth Findr	43.4	260.1	0	0	179.8	116.3	55.6	65.1	31.1	19.8	79.9	148.4	322.1	28	533
Flathead Sole	209.4	273.1	16.6	657.4	167	329.9	206	144.5	112.4	103.8	150	182.7	254.2	232.9	42.9
Rock Sole	0	0	0	53.4	0	020.0	0	0	0	0	0	102.9	0	0	0
Rex Sole	12.7	0	Ŏ	0	Ö	ő	Õ	ő	0	0	ő	0	Ö	1.9	133.2
Dover Sole	21.6	83.3	0	0	0	0	0	130.1	Ő	0	Ö	o o	0	0	209.4
Pac Halibut	18.6	7.8	12	44.3	46	0	0	2	0	13.7	2.8	21.6	22.8	4.9	13
Starry Findr	0	0	115.9	0	0	0	0	0	0	0	2.0	0	0	0	,0
Yellowfin Sole	0	ő	662.7	408.5	25.5	0	0	0	Ö	0	0	125.4	127.1	19.6	0
Other Flatfish	72.3	0	29.9	44.3	32.3	29.1	0	0	35	14.9	0	211.1	84.7	55.8	0
TOTAL FLATFISH	377.9	624.3	837.1	1208	450.7	475.4	261.6	341.7	178.5	152.3	232.7	792.1	810.9	343.2	931.4
Clore	0.4	04.4		•	5.4		7.0	7.0	440	04.4	4.0	447	•	0.4	4.4
Skates	34	31.4	0	0	5.4	2	7.8	7.3	14.2	21.1	1.8	14.7	0	8.4	11
Spiny Dogfish	0	0	0	0	0	0	0	0	0 0	0 0	0	0	0	0	0
Other Elasmobrh	U	U	U	U	U	U	U	0	U	. 0	U	U	U	U	U
Tanner Crab	11	2	0	0	9.3	7.3	23	5.9	18.9	13	21.4	1	7.3	18.8	0
Red King Crab	0	0	0	2.2	1.5	. 0	0	0	0	0	0	0	3.4	2.4	0
Dungeness Crab	0	0	0	3.4	0.5	0	0	0	0	0	0	0	1.2	0	0
Shrimp	2.2	6.6	0	0	6.9	3.9	4.7	2.9	1.5	1	2.1	0	0 .	1.9	0
Scallop	0	1	0	0	0	0	0	0	0	0	0	2.4	0.2	0	0.2
Other Inverts	44.1	11.5	202.2	57.8	9.8	69.1	2.2	1.5	1.5	6.6	10.1	43.1	32.3	51.7	2
TOTAL INVERTS	57.3	21.1	202.2	63.4	27.9	80.3	29.9	10.3	21.8	20.6	33.7	46.5	44.6	74.8	2.2
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CATCH (kg/km)	591.7	949.8	1059.4	1287.8	538.8	682.4	580.5	1092.1	425.7	423.7	350.2	926.3	1285.8	725.5	1555.3

Appendix B. (Page 19 of 20)

													•		
Haul	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285
Location	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD		W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD
Month/Day/Year	8/27/95	8/27/95	8/27/95	8/28/95	8/28/95	8/28/95	8/28/95	8/28/95	8/28/95	8/29/95	8/29/95	8/29/95	8/29/95	8/29/95	8/29/95
Station	UYEX	UYHX	UYFX	UYS	UYQX	UYMX	UYKX	UYO	KULX	KUM	KUK	KUJ	KUI	KUG	KUF
Longitude Start	153 55.6	153 43.4	153 50.6	153 49.2	153 54.5	153 53.9	153 52.7	153 47.9	153 13.5	153 7.3	153 15.2	153 17.7	153 23.4	153 26.1	153 18.3
Latitude Start	57 38.8	57 39.7	57 40.3	57 25.3	57 29.7	57 33.8	57 35.5	57 34.1	57 51.9	57 51.9	57 55.3	57 56.2	57 58.5	58 2.4	58 1.8
Heading, Degrees	0	270	272	180	350	357	324	327	150	296	304	308	295	178	272
Average Depth (m)	185	99	146	73	152	106	124	73	99	66	146	163	234	73	137
Distance Fished (km)	1.9	1.9	1.3	0.9	1.9	1.9	1.3	1.3	0.9	1.3	1.9	1.9	1.5	1.9	1.9
Bottom Temperature	6.2	6.6	6.8	6.8	6.8	6.8	6.7	6.9	6.5	6.5	6.3	6.3	6.3	6.5	6.4
							Kilog	rams/Kilome	eter		**				
Pollock	196.2	111.4	166.9	0	0	171.9	0	63.3	0	107.1	0	248.4	29.1	0	39.4
Pacific Cod	84.3	12.7	39.2	20.6	7.6	0	3.5	0	8.8	8.7	14.9	38.9	8.6	40.7	4.7
Pac Ocean Perch	0.5	0	0	0	. 0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	0	0	0	0	0	0	0	0	0	0	0	0	2.1	0	0.2
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2
Sablefish	0	0	0	0	0.7	2.9	0	0	0	0	0	0	0	0	0
Herring	0	0	Ö	0	0	0	0	Ö	0	0	Ö	0	0	0	0
Salmon	0	0	0	0	0	Ö	ő	12.9	0	0	Ö	0	Ö	0	ő
Sculpins	Ö	1.5	1	ő	ō	2	14.7	1	20.6	51.8	1.7	0	95.5	0	Ö
Other Roundfish	Ö	11.3	Ö	9.3	5.1	0	0.7	4.5	0	0	0	4.7	0.9	0	1.7
TOTAL ROUNDFISH	280.9	136.9	207.1	29.9	13.5	176.8	18.9	81.9	29.4	167.6	16.7	291.9	136.2	40.7	46.3
A ALM ELM	04.0	04.0	00.7	<b>57.0</b>		407.4	400	0.4.0	400.0	00.0	070.0	007.5	407.0	4044	07.0
Arrowtooth Findr	94.3	34.8	92.7	57.8	114.4	137.4	106	84.3	180.8	62.6	673.3	227.5	137.2	164.1	87.9
Flathead Sole	164.8	230	343.2	587.8	169.2	116.8	200.1	337.6	81.8	250.2	372	279.2	79	5.9	123
Rock Sole	0	0	0	0	0	0	0	0	0	321.5	0	0	0	31.4	0
Rex Sole	0	0	0	2.9	0	3.4	0	0	0	0	0	0	0	0	0
Dover Sole	15.7	17.4	Ó	0	12.5	34.3	0	0	2.9	7	0	0	0	27.4	6.6
Pac Halibut	14.2	5.1	0.7	110.7	9.1	17.6	16.8	0	24	39.5	34.8	29.1	0	15.2	2.7
Starry Findr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellowfin Sole	0	17.4	0	46	0	0	0	25.2	81.8	232.3	0	0	0	0	0
Other Flatfish	0	27.9	0	103.8	34.8	14.5	0	158.5	23.5	98.3	0	0	0	0	0
TOTAL FLATFISH	289	332.6	436.7	909.2	340	324	322.9	605.7	394.8	1011.5	1080.1	535.9	216.1	243.9	220.2
Skates	34.3	51.7	8	35.3	54.6	8.6	17.1	0	6.4	17.1	0	11	40.7	15.2	31.1
Spiny Dogfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	4.2	0.7	27.6	13.7	1.2	2	1	0.3	47	0.3	61.2	58	23.6	0.5	0.7
Red King Crab	0	0	0	3.4	0	. 0	0	0	0	0	0	0	0	0	0
Dungeness Crab	Ö	2.9	0.7	2	14.7	1	Ö	17.5	5.4	Ō	Õ	0	ō	0	0
Shrimp	3.9	0	2.8	0	0.5	o O	0.7	0	1	3.5	1.7	1	0.9	Ö	0.5
Scallop	0.0	5.9	0.3	0	0.0	0.2	0.3	Ö	0	0.0	0	Ö	0.0	0	0.0
Other Inverts	16.7	15.4	8.7	0	6.9	10	19.9	6.3	26.9	128.8	14.9	9.8	9.8	11.5	24.7
TOTAL INVERTS	24.7	25	40.2	19.1	23.3	13.2	22	24.1	80.3	132.6	77.9	68.8	34.3	12	26
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CATCH /ba/low)	629	546.0	692.1	002.4	431.3	522.7	381	711 7	510.9	1328.9	11746	907.7	127 1	2110	222 5
TOTAL CATCH (kg/km)	029	546.2	092.1	993.4	451.3	522.1	301	711.7	510.9	1320.9	1174.6	907.7	427.4	311.8	323.5

## Appendix B. (Page 20 of 20)

Haul	286	287
Location	W.KOD	W.KOD
Month/Day/Year	8/29/95	8/29/95
Station	KUE	KUD
Longitude Start	153 17.1	153 10.3
Latitude Start	58 1.2	57 59.1
Heading, Degrees	180	117
Average Depth (m)	124	40
Distance Fished (km)	0.9	0.9
Bottom Temperature	6.5	7.5
Performance	1	1
Fellonnance	•	'
	Kilograms/Kilome	eter
Pollock	1012.5	0
Pacific Cod	7.3	0.5
Pac Ocean Perch	0	0.0
Rougheye Rkfish	0	0
Thornyhead Rkfh	0	0
Other Rockfish	0	0
	0	0
Sablefish		
Herring	0	0
Salmon	0	0
Sculpins	0	0
Other Roundfish	5.4	0
TOTAL ROUNDFISH	1025.2	0.5
Arrowtooth Findr	355.6	26.9
Flathead Sole	82.3	8.3
Rock Sole	0	92.1
Rex Sole	34.3	0
Dover Sole	136.7	0
Pac Halibut	28.4	2.4
Starry Flndr	0	0
Yellowfin Sole	0	4.4
Other Flatfish	0	0
	637.3	134.2
TOTAL FLATFISH	637.3	134.2
Skates	10.8	0.5
Spiny Dogfish	0	0
Other Elasmobrh	0	0
	2.5	
Tanner Crab	0.5	0
Red King Crab	0	0
Dungeness Crab	0	0
Shrimp	0	0
Scallop	0	0
Other Inverts	33.3	38.7
TOTAL INVERTS	33.8	38.7
Other	0	0
TOTAL CATCH (kg/km)	1707.1	173.9

Appendix C. Stations fished during the 1995 Westward Region trawl survey, divided by Districts, Sections, and Stratum with areas in square kilometers and square nautical miles.

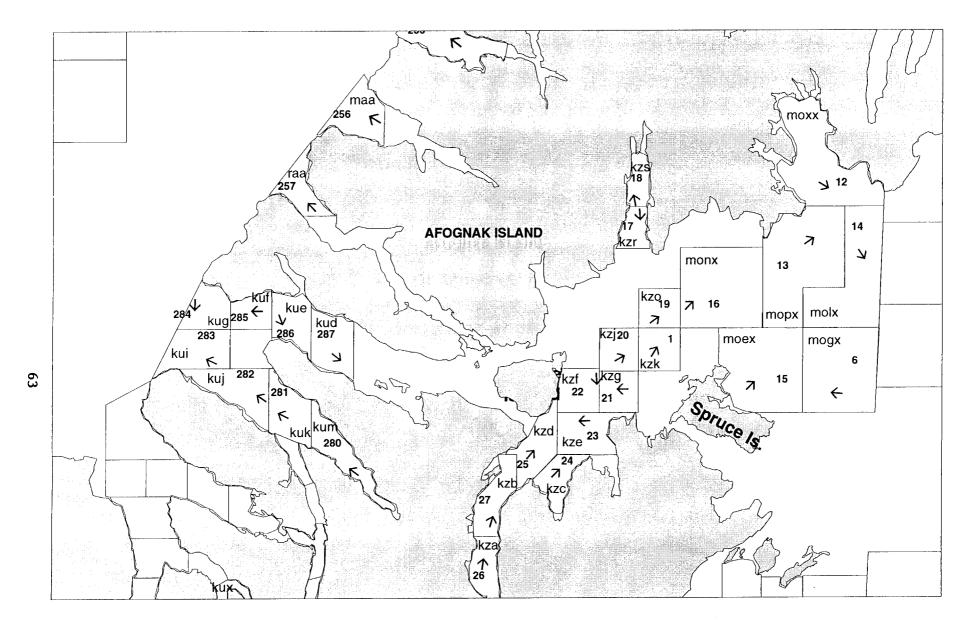
NORTHEAST SECTION   FASTSIDE SECTION   SOUTHEAST SECTION   SOUTHWEST SECTION   Inter Marmot   Upak Bay   Station   KM   NM   Station   KM   NM   KZA   11.7   3.4   UGAA   16.1   4.7   THA   15.1   4.4   643B   34.4   10.6   KZB   2.3   0.8   UGAB   4.7   1.4   THC   19.6   5.7   646A   27.2   7.9   KZC   12.4   3.6   UGAC   3.2   0.9   THD   28.7   3.3   646B   16.5   4.8   KZD   27.5   8.0   UGC   17.5   5.1   THG   21.5   6.3   646C   29.2   8.5   KZD   27.5   8.0   UGC   17.5   5.1   THG   21.5   6.3   646B   16.5   4.8   KZD   21.5   6.3   UGB   12.7   3.7   THT   19.3   5.6   682B   23.0   6.7   KZZ   21.5   6.3   UGB   12.7   3.7   THT   17.7   6.3   683B   21.0   6.1   KZK   21.5   6.3   UGG   11.0   3.2   THH   17.9   5.2   683B   21.0   6.1   KZK   21.5   6.3   UGG   11.0   3.2   THK   16.5   4.8   683D   0.3   2.7   KZD   21.5   6.3   UGG   11.0   3.2   THK   16.5   4.8   683D   0.3   2.7   KZD   21.5   6.3   UGG   11.0   3.2   THM   10.7   3.1   684B   10.3   3.0   KZZ   3.1   0.9   UGM   16.9   4.9   THN   5.2   1.5   684C   8.6   2.5   2	Γ				KODIA	K DISTR	ICT					
Station   KM   SM   Station   KM   NM   KZA   NM   KZA   L17   34   L17   3	NORTHEAST	SECTIO	ON				1	SECTION		SOUTHWEST S	ECTION	
KZA	Inner Ma	rmot		Ugak Bay			South Sit	kalidik		Alitak Flats		
KZP   2.8   0.8   UGAB   4.7   1.4   THC   19.6   5.7   6.46A   27.2   7.9	<u>Station</u>	$\underline{KM}^2$	<u>NM</u> 2	,							$\underline{KM}^2$	
KZC   12.4   3.6   UGAC   3.2   0.9   THD   28.7   8.3   646B   16.5   4.8	L .			1			1					
KZD   23.7   5.9   UGB   5.8   1.7   THF   22.4   6.5   646C   29.2   3.5							1					
KZE   27.5   8.0				1								
Name	t			i .								
KZG	1			1								
KZJ   21.5   6.3   UGF   15.8   4.6   THJ   17.9   5.2   683B   21.0   6.1	1			1			1					
KZK   21.5   6.3   UGG   11.0   3.2   THK   16.5   4.8   683D   9.3   2.7	1			1								
RZO	l l						1					
KZR   13.8   4.0   UGJ   21.5   6.3   THM   10.7   3.1   684B   10.3   3.0   201.4   58.6   CGM   16.9   4.9   158.7   46.1   207.7   60.4				I .			1					6.7
Middle Marmot   Station   KM*   NM*   KLA   21.0   6.1   6.5   6	3			1			I					3.0
Middle Marmot   Station   KM°   NM°   Station   KM°   NM°   Station   KM°   NM°   KLA   21.0   6.1   586   86.0   25.0   Station   KM°   NM°				1			1					2.5
Station   KM   NM   NM   KLA   21.0   6.1   586   86.0   25.0   Station   KM   NM   NM   NM   KLB   9.3   2.7   614   64.3   18.7   ALA   3.1   0.9		201.4	58.6		158.7	46.1		207.7	60.4		263.2	76.5
Station   KM   NM   NM   KLA   21.0   6.1   586   86.0   25.0   Station   KM   NM   NM   NM   KLB   9.3   2.7   614   64.3   18.7   ALA   3.1   0.9												
Station   KM   NM   NLA   21.0   6.1   586   86.0   25.0   Station   KM   NM   NM   NLA   22.8   KLB   9.3   2.7   614   64.3   18.7   ALA   3.1   3.1   3.5   3.5   MOLX   77.7   22.6   KLD   18.2   5.3   651   86.0   25.0   ALB   17.8   5.2   ALD   13.1   3.5   3.5   MORX   86.0   25.0   KLE   8.3   2.4   336.1   97.7   ALD   13.1   3.5   3.5   ALD   13.1   3.5		_		1		\ <b>7</b> • 2	i .	_				
MOEX   78.4   22.8   KLB   9.3   2.7   614   64.3   18.7   ALA   3.1   0.5	1		NTN 42				1 —				V2 42	ND 42
MOGX   76.0   22.1   KLC   19.6   5.7   615   99.8   29.0   ALB   17.8   5.2   5.3   MOLX   77.7   22.6   KLD   18.2   5.3   651   86.0   25.0   ALC   8.2   2.4   ALF   21.5   6.3   ALF   21.5   ALF   21.5   6.3   ALF   21.5   ALF   21.												
MOLX   77.7   22.6   KLD   18.2   5.3				1			1			i .		
MONX	i			1			1					
MOPX   97.7   28.4   MOXX   81.2   23.6   KLG   16.5   4.8   Horse's Head   ALG   20.0   5.8	i i			1								3.8
MOXX   81.2   23.6   KLG   16.5   4.8   KLH   16.9   4.9   Station   KM²   NM²   ALH   16.2   4.7	1			1				550.1	21.1	ŧ		6.3
Agrical Number   Agri	l l						Horse's I	lead				5.8
KIL         21.5         6.3         585X         94.6         27.5         ALJ         15.1         4.4           Station         KM²         NM²         167.9         48.8         688         86.0         25.0         ALK         10.0         2.9           255         129.0         37.5         Horseshoe/Barnabas         726         86.0         25.0         ALM         162.2         4.2           257         86.0         25.0         486A         28.0         8.1         728         86.0         25.0         ALD         16.9         4.9           283         129.0         37.5         486B         29.4         8.6         729         86.0         25.0         ALP         19.3         5.0           284         86.0         25.0         510B         63.2         18.4         759         86.0         25.0         ALR         13.4         3.3           284         86.0         25.0         510B         63.2         18.4         759         86.0         25.0         ALR         13.4         3.3           511A         43.0         12.5         761         86.0         25.0         ALR         13.4 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td><math>NM^2</math></td><td>5</td><td></td><td>4.7</td></t<>									$NM^2$	5		4.7
Number   N				KLI	21.5	6.3	618A	43.0	12.5	ALI	16.7	4.9
Station   KM²   NM²   255   129.0   37.5   Horseshoe/Barnabas   725   86.0   25.0   ALL   8.3   2.4   255   256   86.0   25.0   Station   KM²   NM²   727.0   86.0   25.0   ALO   16.9   4.5   4.5   257   86.0   25.0   ALO   16.9   4.5   4.5   257   86.0   25.0   ALO   16.9   4.5   4.5   257   86.0   25.0   ALO   16.9   4.5   4.5   258   86.0   25.0   ALO   16.9   4.5   4.5   283   129.0   37.5   486B   29.4   8.6   729   86.0   25.0   ALQ   14.4   4.5   4.5   284   86.0   25.0   510B   63.2   18.4   759   86.0   25.0   ALR   13.4   3.5   3.5   2.5   230.0   66.3   25.0   25.0   230.0   66.3   25.0   25.0   230.0   66.3   25.0   25.0   230.0   66.3   25.0   25.0   230.0   66.3   25.0   25.0   230.0   66.3   25.0   25.0   230.0   25	Ì			KLL	21.5	6.3	585X	94.6	27.5	ALJ	15.1	4.4
Texas   Texa	Outer M	armot			167.9	48.8	688	86.0	25.0	ALK	10.0	2.9
256												2.4
257	1			1						t .		4.7
283   129.0   37.5   486B   29.4   8.6   729   86.0   25.0   ALQ   14.4   4.2							1					4.9
284   86.0   25.0   510B   63.2   18.4   759   86.0   25.0   ALR   13.4   3.5   3.	1			1			1			[		
Sinc				1			L			1		
Sind	284			1			1			ALR		
Chiniak Gully         511B         43.0         12.5         911.6         265.0           Station KM² NM² 369X         151.4         44.0         533B         43.0         12.5         Station MM² NM		516.0	150.0								230.0	56.9
Chiniak Gully         533A         43.0         12.5           Station         KM²         NM²         533B         43.0         12.5           369X         151.4         44.0         534A         21.5         6.3         608X         172.0         50.0           395         86.0         25.0         534B         21.5         6.3         676X         172.0         50.0           420         86.0         25.0         534D         28.4         8.25         677X         172.0         50.0           421         86.0         25.0         535A         21.5         6.3         678X         172.0         50.0           442         86.0         25.0         535B         21.5         6.3         712X         172.0         50.0           443         86.0         25.0         535D         21.5         6.3         748X         172.0         50.0           444         86.0         25.0         535D         21.5         6.3         781X         172.0         50.0           444         86.0         25.0         535D         21.5         6.3         781X         172.0         50.0           560         86.	Ì			l .			761					
Station         KM²         NM²         533B         43.0         12.5         Station         KM²         NM           369X         151.4         44.0         534A         21.5         6.3         608X         172.0         50.0           395         86.0         25.0         534B         21.5         6.3         676X         172.0         50.0           420         86.0         25.0         534D         28.4         8.25         677X         172.0         50.0           421         86.0         25.0         535A         21.5         6.3         678X         172.0         50.0           442         86.0         25.0         535B         21.5         6.3         712X         172.0         50.0           443         86.0         25.0         535C         21.5         6.3         748X         172.0         50.0           444         86.0         25.0         535D         21.5         6.3         781X         172.0         50.0           667.4         194.0         559         86.0         25         815X         172.0         50.0           560         86.0         25         816X         172.0	Chiniak	Gully		1				711.0	205.0	Compass R	ose	
369X       151.4       44.0       534A       21.5       6.3       608X       172.0       50.0         395       86.0       25.0       534B       21.5       6.3       676X       172.0       50.0         420       86.0       25.0       534D       28.4       8.25       677X       172.0       50.0         421       86.0       25.0       535A       21.5       6.3       678X       172.0       50.0         442       86.0       25.0       535B       21.5       6.3       712X       172.0       50.0         443       86.0       25.0       535C       21.5       6.3       748X       172.0       50.0         444       86.0       25.0       535D       21.5       6.3       781X       172.0       50.0         444       86.0       25.0       535D       21.5       6.3       781X       172.0       50.0         667.4       194.0       559       86.0       25       815X       172.0       50.0         560       86.0       25       816X       172.0       50.0	l .	• .	$NM^2$	1						1		$\underline{NM}^2$
395     86.0     25.0     534B     21.5     6.3     676X     172.0     50.0       420     86.0     25.0     534D     28.4     8.25     677X     172.0     50.0       421     86.0     25.0     535A     21.5     6.3     678X     172.0     50.0       442     86.0     25.0     535B     21.5     6.3     712X     172.0     50.0       443     86.0     25.0     535C     21.5     6.3     748X     172.0     50.0       444     86.0     25.0     535D     21.5     6.3     781X     172.0     50.0       667.4     194.0     559     86.0     25     815X     172.0     50.0       560     86.0     25     816X     172.0     50.0				1								50.0
421     86.0     25.0     535A     21.5     6.3     678X     172.0     50.0       442     86.0     25.0     535B     21.5     6.3     712X     172.0     50.0       443     86.0     25.0     535C     21.5     6.3     748X     172.0     50.0       444     86.0     25.0     535D     21.5     6.3     781X     172.0     50.0       667.4     194.0     559     86.0     25     815X     172.0     50.0       560     86.0     25     816X     172.0     50.0		86.0	25.0	534B	21.5	6.3				67 <b>6</b> X	172.0	50.0
442     86.0     25.0     535B     21.5     6.3     712X     172.0     50.0       443     86.0     25.0     535C     21.5     6.3     748X     172.0     50.0       444     86.0     25.0     535D     21.5     6.3     781X     172.0     50.0       667.4     194.0     559     86.0     25     815X     172.0     50.0       560     86.0     25     816X     172.0     50.0				534D	28.4	8.25				1	172.0	50.0
443     86.0     25.0     535C     21.5     6.3     748X     172.0     50.0       444     86.0     25.0     535D     21.5     6.3     781X     172.0     50.0       667.4     194.0     559     86.0     25     815X     172.0     50.0       560     86.0     25     816X     172.0     50.0	421	86.0	25.0	535A	21.5	6.3				678X	172.0	50.0
444     86.0     25.0     535D     21.5     6.3     781X     172.0     50.0       667.4     194.0     559     86.0     25     815X     172.0     50.0       560     86.0     25     816X     172.0     50.0										l .		50.0
667.4         194.0         559         86.0         25         815X         172.0         50.0           560         86.0         25         816X         172.0         50.0	i i			•								50.0
560 86.0 25 816X 172.0 50.0	444						1					50.0
	1	667.4	194.0							3		
1 Chiminal 1 MAT VALL VALL 1 UNIV 1771 CAT	1			1			1					
	Chiniak		XTX 42	561	86.0	25 25				881X	172.0	50.0
										1	1/20	500.0
CHA 5.5 1.6 588 86.0 25 CHB 7.9 2.3 589 86.0 25				1								
CHB 7.9 2.3 369 80.0 25 CHE 20.6 6.0 619 86.0 25												
CHF 12.7 3.7 620 86.0 25												
CHG 34.7 10.1 621 86.0 25				1								
CHI 32.34 9.4 654 86.0 25							1			1		
CHJ 35.8 10.4 655 86.0 25.0												
CHK 8.6 2.5 656 86.0 25.0				1			1					
CHL 14.1 4.1 695 86.0 25.0				i			1			1		
172.3 50.1 696 86.0 25.0												
1204.0 350.0					1204.0	350.0	1					
	L						_1					

			}	(ODIA	K DISTRIC	T (Conti	nued)				
N.MAINLAN	D SECTI	ON	WESTSID	E SECT	ION						
<u>Station</u>	<u>KM</u> <sup>2</sup>	NM²	Uyak Bay			Kuprean	of-Viekod	a	Uganik Bay	-	
2	86.0	25.0	<u>Station</u>	$\underline{KM}^2$	<u>NM</u> ²	Station	$\underline{KM}^2$	$NM^2$	<u>Station</u>	$KM^2$	$NM^2$
3	86.0	25.0	UYBX	21.5	6.3	KUD	27.2	7.9	KULX	2.1	0.6
31	83.9	24.4	UYEX	30.0	8.7	KUE	11.4	3.3	KUN	2.8	0.8
60	86.0	25.0	UYFX	22.1	6.4	KUF	11.3	3.3	KUO	8.0	2.3
61	86.0	25.0	UYHX	4.1	1.2	KUG	15.5	4.5	KUP	13.3	3.9
90	80.5	23.4	UYKX	13.9	4.0	KUI	6.4	1.9	KUQ ·	20.6	6.0
91	86.0	25.0	UYMX	20.9	6.1	KUJ	17.0	5.0	KUS	12.2	3.5
117	98.0	28.5	UYO	3.4	1.0	KUK	14.1	4.1	KUT	9.4	2.7
118	86.0	25.0	UYQX	7.7	2.2	KUM	10.5	3.1	KUU	13.7	4.0
119	86.0	25.0	UYS	13.4	3.9	KUY	4.1	1.2	KUV	4.1	1.2
120	86.0	25.0		137.0	39.8		117.5	34.2	KUW	5.2	1.5
121	86.0	25.0			1				KUX	4.1	1.2
144	60.9	17.7	West Afog	nak					KUYX	2.6	0.8
145	86.0	25.0	Station	$KM^2$	NM <sup>2</sup>			ŀ		98.1	28.5
146	86.0	25.0	RAA	6.7	2.0			{			
147	86.0	25.0	PAA	15.1	4.4			ì			
171	11.5	3.3	MAA	10.6	3.1						
171X	8.1	2.4		32.4	9.4						
171 <b>Y</b>	29.2	8.5	Ī								
172	89.4	26.0						ļ			
173	86.0	25.0									
174	86.0	25.0			KODIA	K DISTRIC	TOTAL	S			
198	86.0	25.0		-							
199	86.0	25.0			SECTION		$KM^2$	$NM^2$			
200	86.0	25.0			Northeast		2054.2	597.2			
222	113.5	33.0			Eastside		1530.5	444.9			
223	86.0	25.0			Southeast		1455.4	423.1			
224	86.0	25.0			Southwest		2213.1	643.4			
	2209.1	642.2			Westside		385.1	112.0			
1					N. Mainland		2209.1	642.2			
					Kodiak District		9847.4	2862.6			

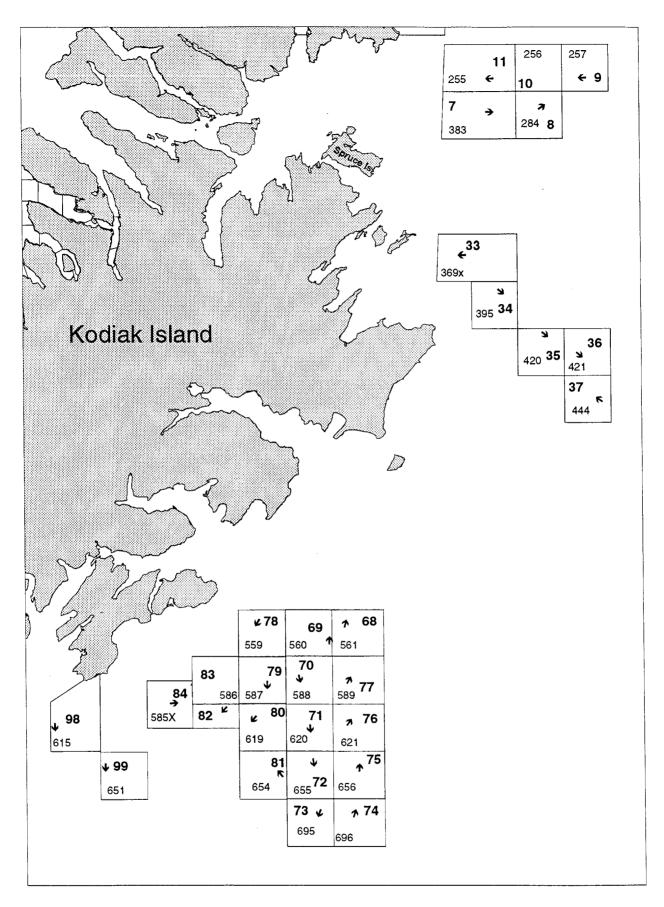
				CHIGN	VIK DIS	TRICT				,	
CHIGNIK B	CHIGNIK BAY SECT.			IVANOF SECTION			MITROFANIA SECT.				
Station	$KM^2$	NM <sup>2</sup>	Station	$KM^2$	NM <sup>2</sup>	Station	KM²	$NM^2$	1		
4256	24.1	7.0	4000	15.8	4.6	4035	68.8	20.0			
4264	20.2	5.9	4007	59.5	17.29	4048	14.8	4.3	CHIGNIK DI	STRICT	
4265	6.6	1.9	4008	42.2	12.27	4049	57.3	16.7	TOTAL	.s	
4266	19.7	5.7	400X	5.6	1.6	4063	57.3	16.7			
4267	21.5	6.3	4024	65.9	19.2	4064	57.3	16.7	SECTION	$\underline{KM}^2$	$NM^2$
4270	17.2	5.0	4915	51.8	15.06	4065	80.3	23.3	Chignik Bay	253.1	73.6
4271	10.3	3.0		240.8	70.0		335.8	97.6	Ivanof	240.8	70.0
4272	16.0	4.6	ŀ						Kukulik	72.2	21.0
4274	21.5	6.3	KUJULIK SECTION			1			Mitrofania	335.8	97.6
4277	21.5	6.3	Station	KM	NM <sup>2</sup>	1				901.9	262.2
4278	21.5	6.3	4298	19.3	5.6						
4282	21.5	6.3	4302	21.1	6.1						
4312	22.0	6.4	4301	21.5	6.3						
4964	9.6	2.8	4296	10.3	3.0						
	253.12	73.6		72.2	21.0						

<sup>-</sup>Continued-

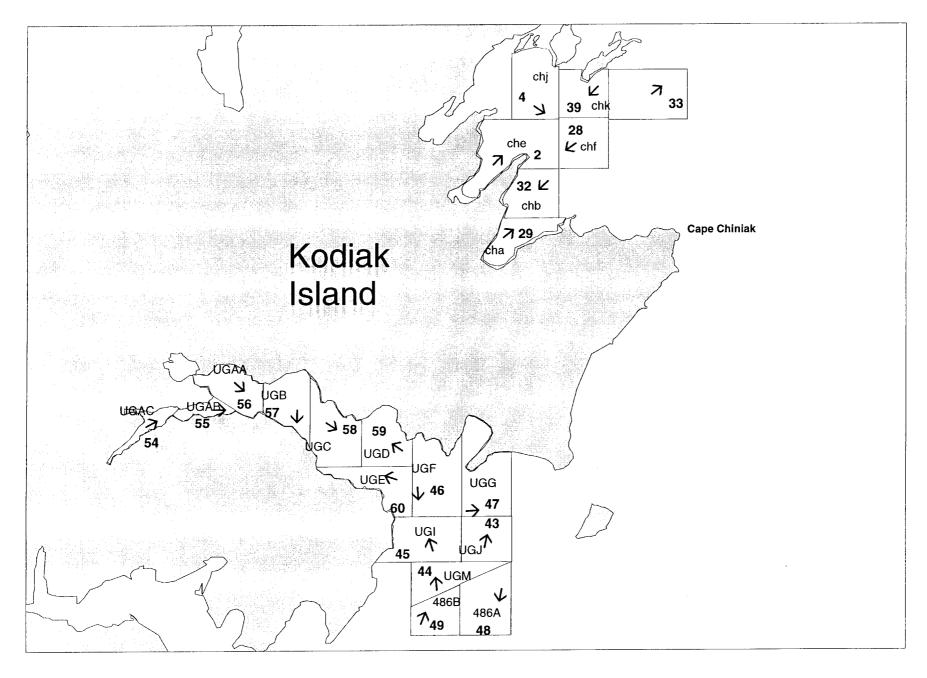
EASTERN ALEUTIAN DISTRICT									
AKUTAN BAY	UNALASKA BAY	MAKUSHIN BAY							
Station KM <sup>2</sup> NM <sup>2</sup>	Station KM <sup>2</sup> NM <sup>2</sup>	Station KM <sup>2</sup> NM <sup>2</sup>							
AKA 33.3 9.7	KAA 19.5 5.7	MKB 16.0 4.6							
AKC 21.3 6.2	UNC 22.7 6.6	MKC 18.5 5.4							
AKD 23.5 6.8	UND 11.7 3.4	MKE 29.2 8.5							
AKG 21.5 6.3	UNE 18.0 5.2	MKF 20.9 6.1							
AKL 21.5 6.3	UNF 21.5 6.3	MKJ 23.6 6.9							
121.1 35.2	UNG 21.5 6.3	MKK 37.6 10.9							
	UNI 19.8 5.8	MKN 26.2 7.6	EASTERN ALEUTIAN						
	UNJ 21.5 6.3	MKP 12.3 3.6	DISTRICT TOTALS						
	156.1 45.4	184.45 53.62							
BEAVER INLET	AKUN BAY	USOF BAY	Area KM² NM²						
Station KM <sup>2</sup> NM <sup>2</sup>	Station KM <sup>2</sup> NM <sup>2</sup>	Station KM <sup>2</sup> NM <sup>2</sup>	Akutan 121.05 35.2						
BIB 17.5 5.1	ANA 24.1 7.0	USA 13.0 3.8	Beaver I. 175.89 51.1						
BID 19.1 5.5	AND 24.0 7.0	USB 19.8 5.8	Unalaska 156.14 45.4						
BIG 22.7 6.6	48.1 14.0	USC 21.5 6.3	Akun 48.091 14.0						
BIK 13.1 3.8		USF 13.8 4.0	Cape Idak 64.5 18.8						
BIN 17.5 5.1		USG 20.4 5.9	Makushin 184.45 53.6						
BIU 86.0 25.0		88.477 25.72	Usof Bay 88.477 25.7						
175.9 51.1			Pumistone 20.055 5.8						
			858.7 249.6						
1									
	CAPE IDAK SECTION	PUMISTONE SECTION							
	Station KM <sup>2</sup> NM <sup>2</sup>	Station KM <sup>2</sup> NM <sup>2</sup>							
	IDG 21.5 6.3	PUA 4.8 1.4							
	IDH 21.5 6.3	PUB 15.3 4.4							
	IDK 21.5 6.3	20.055 5.83							
	64.5 18.8								



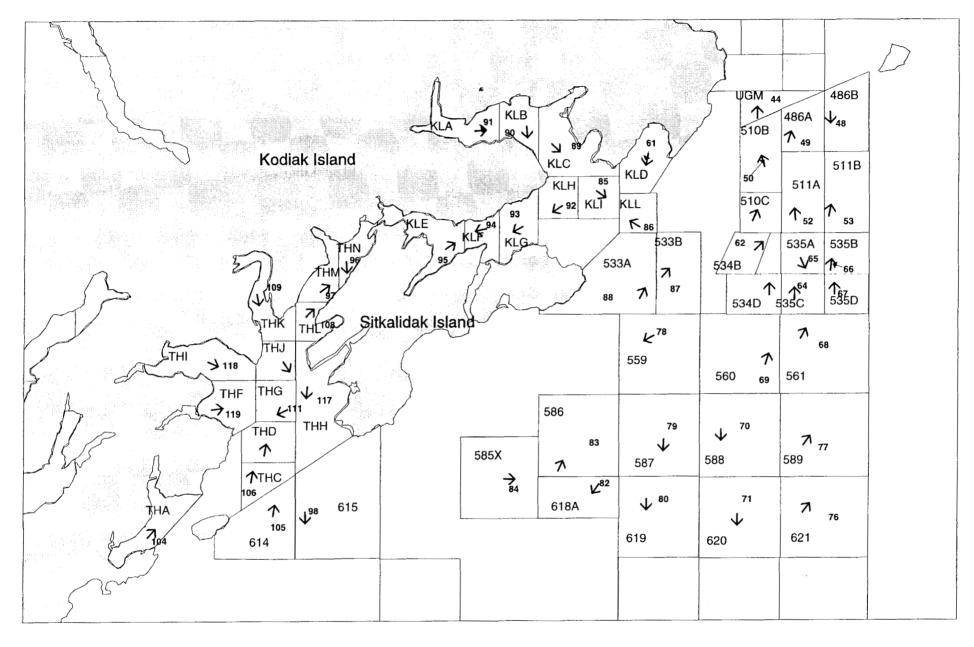
Appendix D.1 Station boundaries and names, and trawl haul numbers (bold) and locations (arrows), north Kodiak Island and west Afognak Island: June and August, 1995.



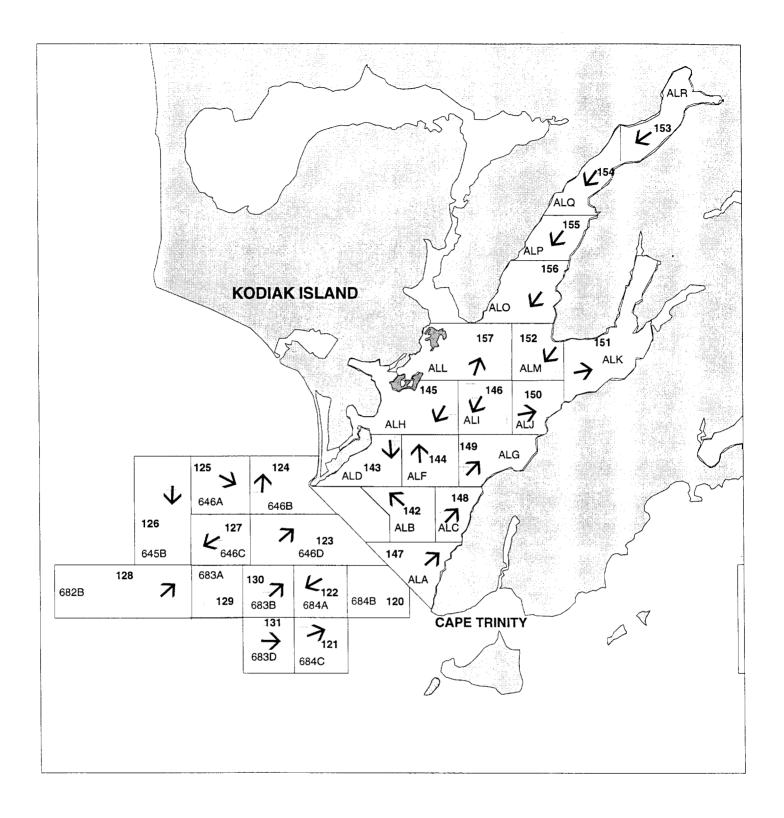
Appendix D.2 Station boundaries and names, and trawl haul numbers (bold) and locations (arrows), off-shore Marmot Bay, Chiniak Bay and Barnabas Gully, June and July, 1995.



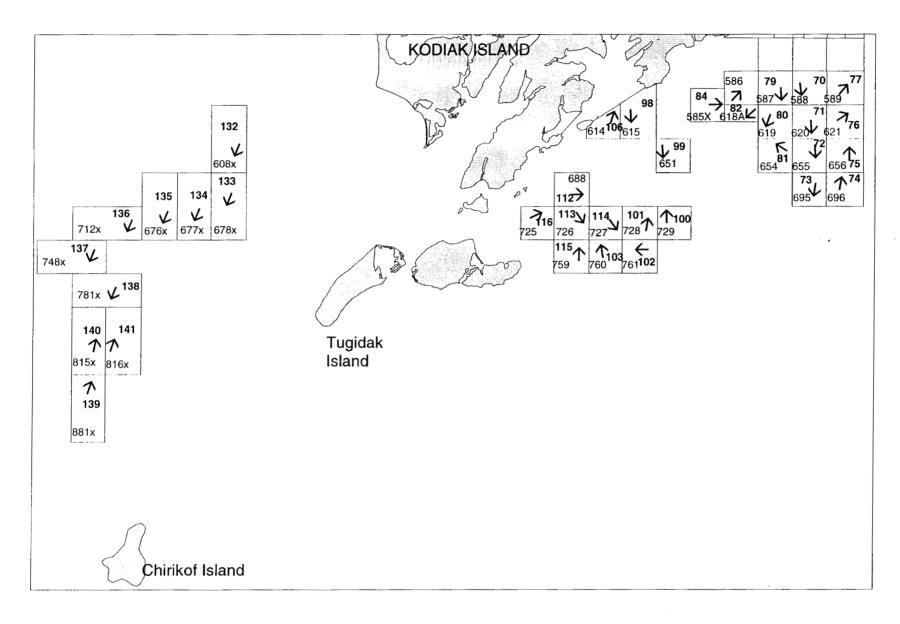
Appendix D.3 Station boundaries and names, and trawl hauul numbers (bold) and locations (arrows), Chiniak and Ugak Bays, June and July 1995,



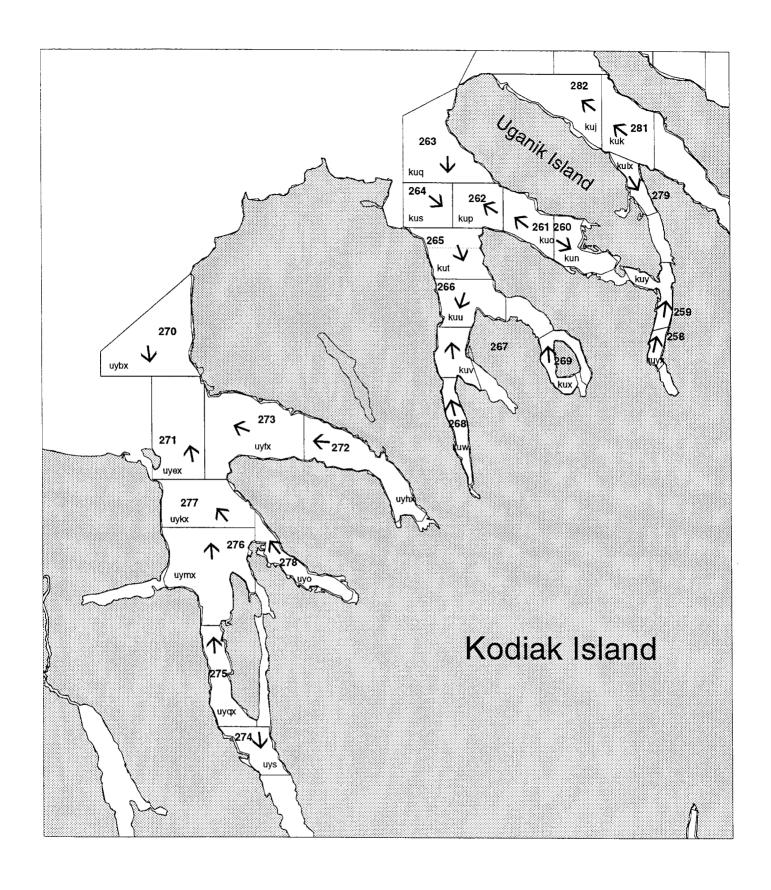
Appendix D.4 Station boundaries and names, trawl haul numbers (bold) and locations (arrows), Kiliuda Bay and South Sitkalidak Strait, June and July, 2995.



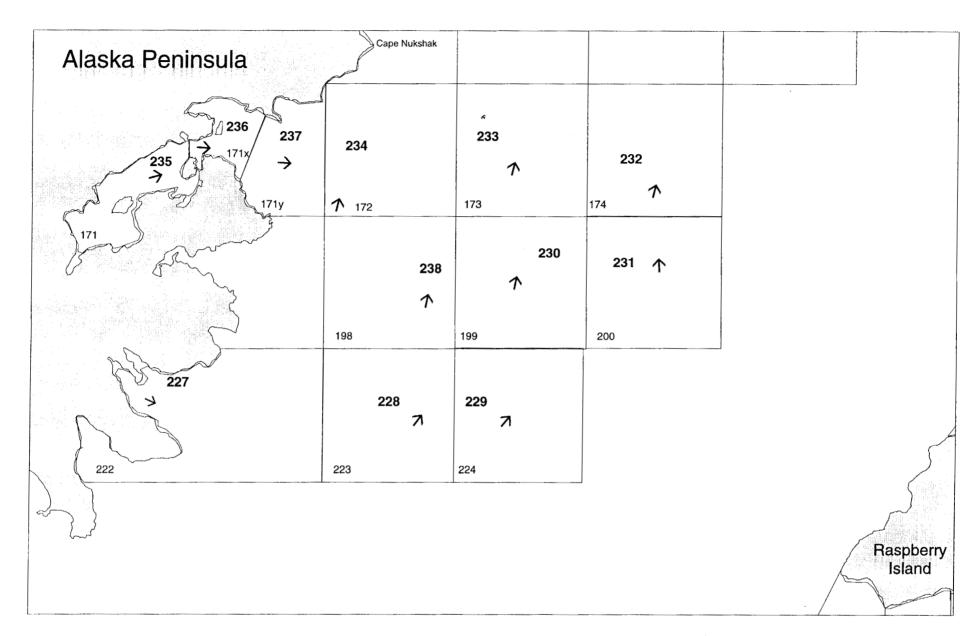
Appendix D.5 Station boundaries and names, and trawl haul numbers (bold) and locations (arrows, Alitak Bay area, July 1995.



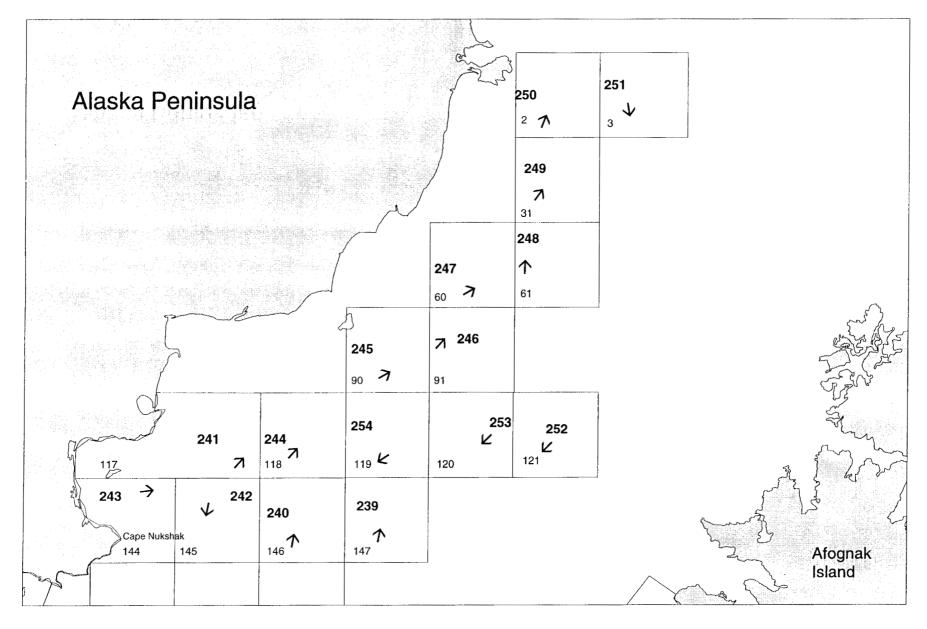
Appendix D.6 Station boundaries and names, and trawl haul numbers (bold) and locations (arrows), south Kodiak Island offshore, June and July 1995.



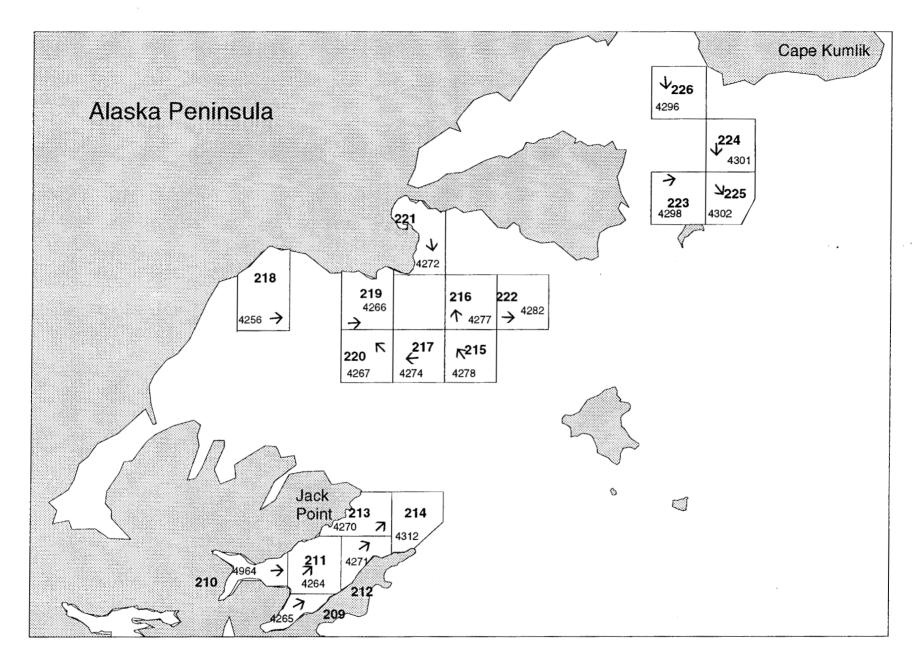
Appendix D.7. Station boundaries and names, and trawl haul numbers (bold) and locations (arrows), Uganik Bay and Uyak Bay, August 1995.



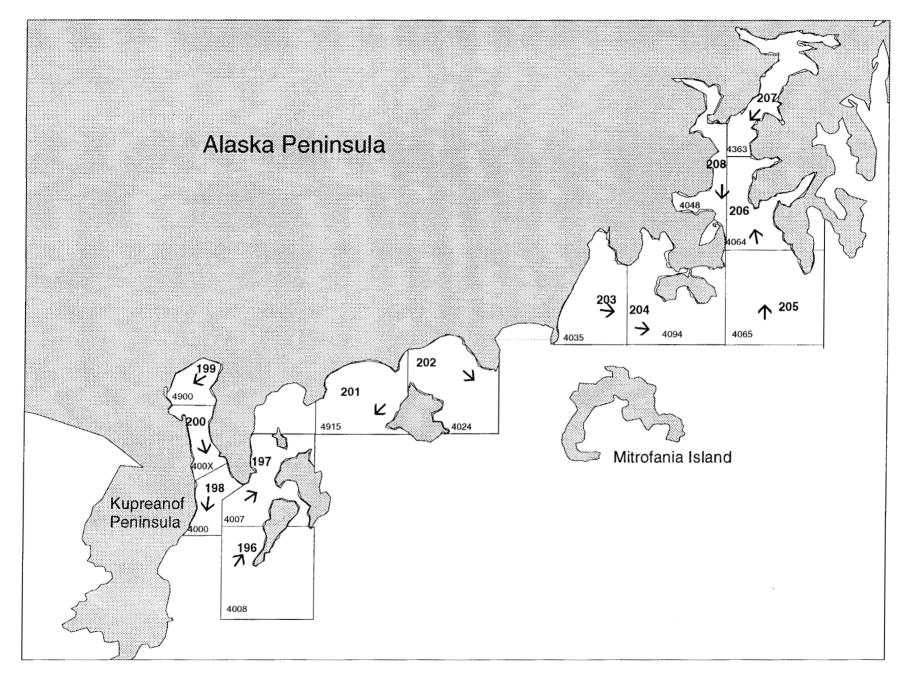
Appendix D.8 Station boundaries and names, and trawl haul numbers (bold) and locations (arrows), Shelikof Strait south of Cape Nukshak, August 1995.



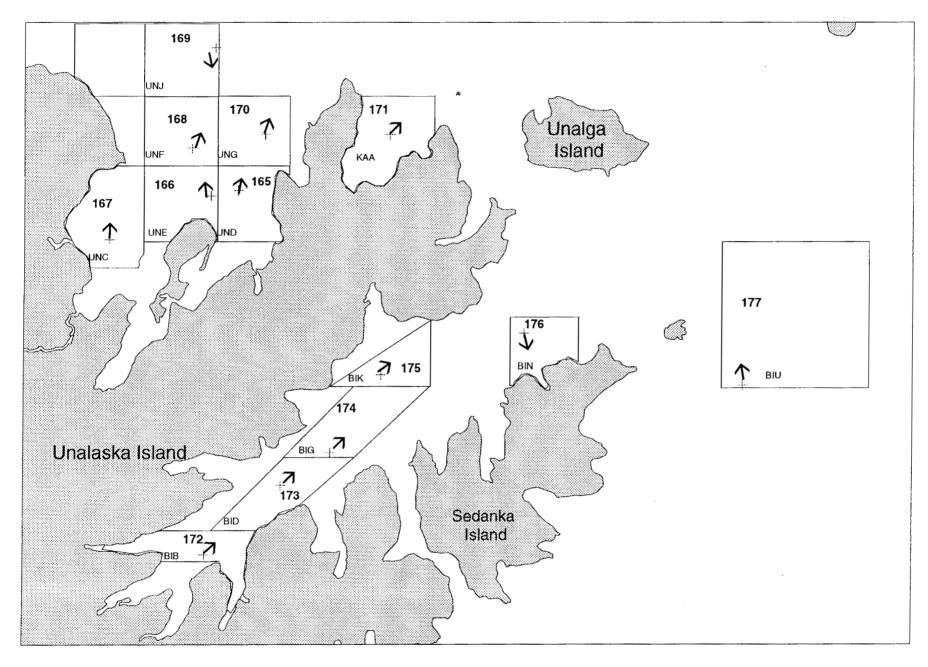
Appendix D.9 Station boundaries and names, and trawl haul numbers (bold) and locations (arrows), Shelikof Strait north of Cape Nukshak, August 1995.



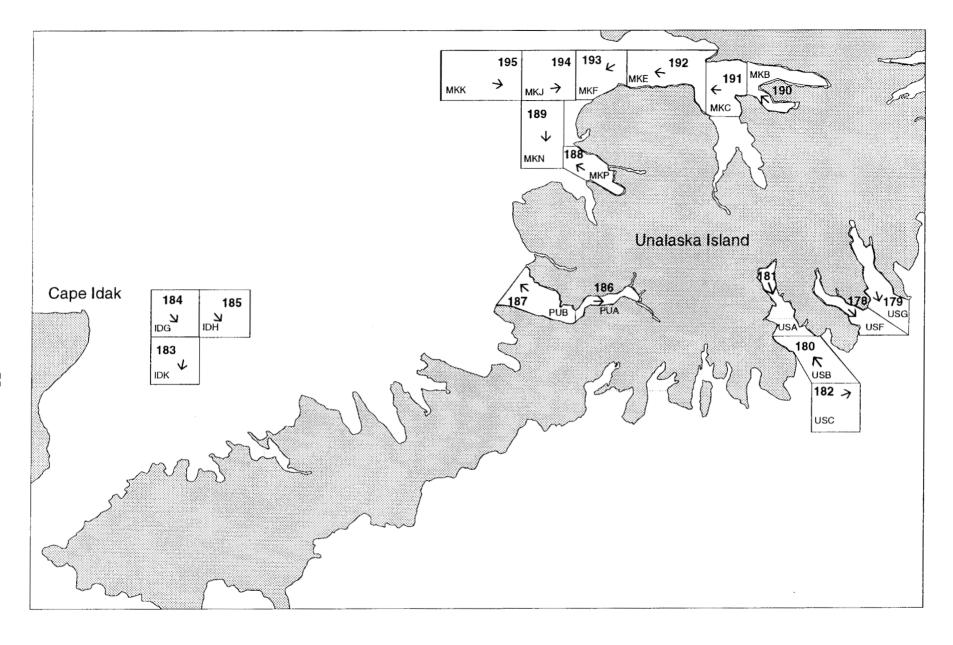
Appendix D.10 Station boundaries and names, and trawl haul numbers (bold) and locations (arrows), Chignik Bay, Kujulik Bay, and Castle Bay, August 1995.



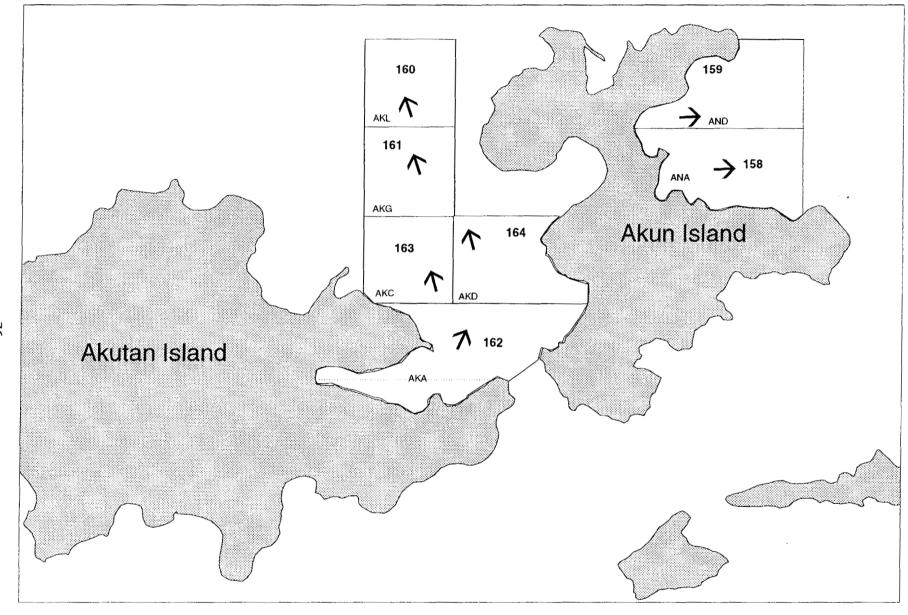
Appendix D.11 Station boundaries and names, and trawl haul numbers (bold) and locations (arrows), Kuiukta Bay, Mitrofania Island area, and Ivanof Bay, August 1995.



Appendix D.12 Station boundaries and names, and trawl haul numbers (bold) and locations (arrows), Unalaska and Beaver Inlet, August 1995.



Appendix D.13 Station boundaries and names, and trawl haul numbers (bold) and locations (arrows), western Unalaska Island and Cape Idak, Umnak Island, August 1995.



Appendix D.14 Station boundaries and names, and trawl haul numbers (bold) and locations (arrows), Akutan Bay and Akun Bay, July 1995.

Appendix E. Numbers of Tanner crab per 1.85 km (1 nautical mile) in 1995 in the Kodiak Management District with population index by section.

Sta	Tow		Females				gal Males		Recruit	Postre	ecruit	Total	Total	Total
tion	#	Juv	Adult	Total	<70	70-91	92-114	>114		<165	>164	Legal	Male	Crab
NORTH	EAST													
KZK	1	23	1	24	17	7	2	1	0	0	0	0	26	50
CHE	2	1	0	1	2	1	0	0	0	0	0	0	3	4
CHE	3	1	0	1	0	0	0	0	0	0	0	0	0	1
CHI	4	0	1	1	1	1	0	0	0	0	0	0	1	2 3
CHJ	5	1	0	1	1	1	0	0	0	0	0	0	66	131
MOGX	6 7	64 5	1	65 5	6 <b>4</b> 6	0	0	1	0	0	0	0	6	12
283	,	_	0	5 1	0	0	0	0	0	0	0	0	1	2
28 <b>4</b> 257	8	1	0	1	0	0	0	0	0	0	0	0	0	1
256	10	1	0	1	0	0	0	1	0	0	0	o o	1	2
255	10 11	0	0	0	1	ő	1	0	0	ő	Õ	Ô	1	1
MOXX	12	337	28	365	406	155	13	4	o o	0	0	ő	578	943
MOPX	13	259	6	265	234	10	0	ō	Ô	ő	ő	ŏ	244	509
MOLX	14	17	146	163	6	3	16	43	Õ	19	ő	19	87	250
MOEX	15	147	5	152	136	5	0	10	ŏ	0	Õ	0	141	293
MONX	16	47	15	62	23	28	9	4	ĭ	ĭ	ŏ	i	65	126
KZR	17	4	21	25	3	6	8	9	3	ī	ō	4	29	54
KZS	18	8	85	93	4	19	14	7	1	1	0	2	46	139
KZO	19	29	6	36	38	8	2	0	0	0	0	0	48	84
KZJ	20	5	ĭ	6	9	3	1	0	0	0	0	0	12	18
KZG	21	15	0	1.5	13	4	1	0	0	0	0	. 0	17	32
KZF	22	5	0	5	3	1	0	0	0	0	0 -	0	3	8
KZE	23	4	0	4	6	1	0	0	0	0	0	0	8	11
KZC	24	3	0	3	1	0	0	0	0	0	0	0	1	4
KZD	25	7	1	7	14	3	1	1	0	0	0	0	18	26
KZA	26	37	0	37	51	4	1	0	0	0	0	0	56	92
KZB	27	48	3	51	24	15	3	1	1	0	0	1	43	94
CHF	28	50	3	53	37	13	9	1	1	0	0	1	60	113
CHA	29	2	0	2	0	1	0	0	0	0	0	0	1	2
CHA	30	1	0	1	0	0	0	0	0	0	0	0	0	1
CHA	31	1	0	1	2	0	0	0	0	0	0	0	2	3
CHB	32	9	1	9	7	1	1	1	2	0	0	2	11	20
369X	33	0	0	0	1	0	U	0	0	0	0	0	1	0
395	34	0	0	0	0	0	U	0	0	0	0	0	0	0
420	35	0	0	0	0	0	Ü	0	0	0	0	Ú	0	0
421	36	0	0	0	0	0	0	0	0	0	0	0	1	1
444	37	0	0	0	1	0	•	17	2	10	0	13	90	156
CHK	38	45	21 85	66 95	40 5	3 29	16 67	28	د 1	5	0	6	136	231
CHK	39	10		95 30	12	29 3	3	∠8 2	0		0	ن 1	21	50
CHL	40 41	22 10	8 0	10	12	1	0	0	0	0	0	0	. 11	22
CHB CHB	41	4	0	4	3	1	1	0	1	0	0	1	5	10
Pop I		6481040	1423393	7904433	6459818	1453343	326713	372625	10279	132191	0	142470	8754968	16659401

Appendix E. (Page 2 of 5)

Sta tion	Tow #	Juv	Females_ Adult	Total	<70	Sublec	gal Males 92-114	>114	Recruit	Postro	ecruit >164	Total Legal	Total Male	Total Crab
EASTS	IDE													
UGJ	43	0	0	0	0	0	0	0	0	o	0	0	0	0
UGM	44	17	1	18	18	0	0	2	0	1	0	1	20	38
UGI UGF	45	69 6	0	69 6	67 7	0	0	1 0	0	0 1	0	0	67	136
UGG	46 47	0	0	0	0	0	0	0	0	0	0	1	8	13 0
486B	48	1	0	1	0	0	0	0	0	0	0	0	0	1
486A	49	Õ	ő	ō	ő	0	ő	Ö	0	Ö	0	ő	ő	ñ
510B	50	2	Ō	2	2	ō	Ō	Ō	ō	Ö	Ö	Ö	2	4
510C	51	0	0	0	0	0	0	0	0	0	Ō	0	0	Ö
511A	52	0	0	0	0	0	0	0	0	0	0	0	0	0
511B	53	0	0	0	0	0	0	0	0	0	0	0	0	0
UGAC	54	4	2	5	0	. 8	6	7	8	1	1	10	31	37
UGAB	55	23 9	11 36	34	16 0	13	24 93	16	0 5	0	0	0	69	103
UGAA UGB	56 57	2	0	<b>4</b> 5 2	3	24 1	93	15 0	0	0 0	0	5 0	136 4	181 6
UGC	58	17	1	18	13	1	1	1	0	1	1	2	16	34
UGD	59	60	ō	60	58	ō	ō	1	ŏ	ō	Ô	õ	59	119
UGE	60	72	25	97	52	1	6	3	ī	2	ì	3	65	162
KLD	61	2	1	2	1	0	0	0	0	0	0	0	1	3
534B	62	0	0	0	1	0	0	0	0	0	0	0	1	1
534D	63	0	0	0	1	0	1	1	0	1	0	1	3	3
535C	64	18	1	19	12	0	1	1	0	1	0	1	1.3	32
535A 535B	65 66	2	1 1	3 1	2 0	0 1	1	5	0	0	0	0	8 1	10 2
535D	67	0	0	0	0	0	1	2	0	0	0	0	2	2
561	68	ő	ő	ő	1	0	Ô	0	ő	0	0	ő	1	1
560	69	6	í	7	8	1	ĭ	i	ŏ	ĭ	ŏ	í	11	18
588	70	45	1	46	38	2	3	3	0	1	0	1	46	92
620	71	113	4	117	82	8	3	3	0	2	0	2	97	214
655	72	20	14	34	15	2	3	10	1	3	0	4	34	68
695	73	10	8	17	28	31	15	9	0	2	0	2	85	103
696 656	74 75	94 14	12 4	106 18	71 13	2	2 3	4 4	0 1	0 2	0	0 2	79	185
621	76	3	0	3	6	6 0	3	1	0	1	0	1	28 10	46 13
589	77	ő	ŏ	ő	2	ő	1	ī	Ö	ō	0	Ô	3	3
559	78	6 <b>6</b>	3	7 <b>0</b>	61	8	ī	2	ŏ	Ö	ő	ŏ	71	140
587	79	33	3	36	33	2	2	3	Ö	Ō	ō	ō	40	76
619	80	7	6	13	13	3	6	6	0	1	0	1	29	43
KLI	85	13	0	13	13	0	0	0	0	0	0	0	13	26
KLL	86	2	0	2	2	0	0	1	0	0	0	0	3	4
533B	87	0	0	0	0	0	0	0	0	0	0	0	0	0
533A KLC	88 89	21 6	9	21 15	13 8	0	0 1	1	0 0	0	0 0	0	. 13	35
KLB	90	8	0	8 T2	6	0	0	0	0	0	0	0	6	24 13
KLA	91	5	0	5	9	0	0	14	5	0	0	5	28	33
KLH	92	9	ŏ	9	12	ő	ŏ	1	0	ő	Ö	ő	13	23
KLG	93	61	3	64	32	5	2	ī	Ö	ō	ŏ	ŏ	40	104
KLF	94	158	3	161	106	37	2	2	0	Ō	Ö	Ö	147	308
KLE	95	154	1	155	140	62	6	2	0	1	0	1	212	367
Don F		2706016	505420	420222E	2216072	E04520	15556	411402	24050	07015	2204	115067	4004433	0306773
Pop E	st.	3796916	505420	4302335	3326873	594529	456566	411403	24858	87815	2394	115067	4904437	9206773

-Continued-

### Appendix E. (Page 3 of 5)

Cha	Mora		Females			Subles	gal Males		Recruit	Postre	ecruit	Total	Total	Total
Sta tion	Tow #	Juv	Adult	Total	<70	70-91	92-114	>114		<165	>164	Legal	Male	Crab
SOUTHE	AST													
618A 586 585X	82 83 84	1 7 32	1 1 2	1 8 34	1 3 29	0 0 0	0 1 0	0 0 0	0 0 0	1 0 0	0 0	1 0 0	2 4 29	3 12 63
THN THM 615	96 97 98	16 33 8	1 0 0	16 33 8	9 35 4	2 2 0	1 1 0	8 1 5	2 2 1	3 1 0	0 0 0	5 3 1	25 40 10	41 73 17
651 729 728	99 100 101	70 10 23	0 0	70 10 23	52 6 18	0 0 0	0 0 1	1 0 0	0 0 0	0 0 0	0 0 0	0 0 0	52 6 18	122 16 42
761 760 THA	102 103 104	13 0	0 0	2 13 0	3 15 1	0 0 0	0 0 0	0 0 0	0 0 1	0 0 0	0 0 0	0 0 1	3 15 2	5 28 2
614 THC THD	105 106 107	69 12 1	2 5 22	71 18 23	56 11 1	0 1 1	1 0 1	3 1 1	0 0 0	3 4 6	0 0 0	3 4 6	62 17 9	133 35 32
THL THK THJ	108 109 110	24 2 19	1 0 1	25 2 19	12 4 21	1 0 0	1 3 1	3 5 3	7 20 21	0 0 0	0 0 2	7 20 22	23 32 46	47 35 66
THG 688 726	111 112 113	13 9 4	4 0 0	18 9 4	12 9 6	0 0 0	1 0 0	1 0 0	0	0 0 0	0 0 0	0 0 0	13 9 6	31 17 10
727 759 725	114 115 116	70 23 1	0 0 0	70 23 1	73 21 1 56	0 1 0 1	0 0 0	0 0 0 1	0 0 0 2	1 0 0	0	1 0 2	73 22 1 59	142 44 2 112
THH THI THF	117 118 119	52 15 102	0 5	52 15 107	16 105	2 0	1 2	1 1	0 0	0	0	0 0	20 107	35 214
Pop 1	Est	2728372	110416	2838788	2425953	15058	28566	82912	76922	47721	2370	127013	2679501	5518289
SOUTHWI	EST													
684C	120 121 122	5 0 0	0 0 0	5 0 0	4 1 0	0 0 0	0 0 0	0 0 1	0 0 0	0 0 0	0 0 0	0 0 0	4 1 1	10 1 1
646B 646A	123 124 125	0 1 2	0 0 0	0 1 2	0 1 3	0 0 0	0 0 0	0 0 0	0 0 0	0	0 0	0 0 0	0 1 3	0 2 5
646C 682B	126 127 128	1 1 3	0 0 0	1 1 3	1 1 4	0 0 0	0 0 0	1 1 0	0	0 0 0	0 0 0	0	1 2 4 1	2 3 7
683B 683D	129 130 131	0 0 1	0 0 0	0 0 1	1 0 2	0 0 0	0 0 0	0 0 0	0 0 0	0 0 1	0 0 0	0 0 0 1	. 2	1 0 2 1
678X 677X	132 133 134	0 0 0	0 0 0 1	0 0 0 1	0 1 0 2	0 0 0	0 0 0 1	0 0 0 1	0 0 0	0	0	0	1 0 3	1 0 4
	135 136 137	1 1	1 1	2	1 0	0	1	1 2	0	0	0	0	2	4

-Continued-

# Appendix E. (Page 4 of 5)

Sta Tow tion #	Juv	Females Adult	Total	<70	Suble	gal Males 92-114	>114	Recruit	Postrec <165	ruit >164	Total Legal	Total Male	Total Crab
781X 138 815X 140 816X 141 ALB 142 ALD 143 ALF 144 ALH 145 ALI 146 ALA 147 ALC 148 ALG 149 ALJ 150 ALK 151 ALM 152 ALR 153 ALQ 154 ALD 154 ALD 154 ALD 154 ALD 156 ALD 157	0 0 0 0 1 1 2 2 6 12 3 0 2 0 1 1 2 1 5	0 0 0 0 1 9 13 5 24 5 1 0 0 2 1 1 2 5	0 0 0 0 1 3 11 19 17 27 5 3 0 1 1 3 16 15 15	0 0 0 0 11 4 2 6 1 1 1 2 1 8 6 5 5	0 0 0 0 0 0 0 0 0 0 0 0 1 8 10 5 25	1 0 0 0 0 0 0 1 9 0 3 4 2 1 0 1 5 4 8 8 3 5	0 0 0 0 0 1 6 9 4 22 1 2 0 1 2 3 1 8 9	0 0 0 0 0 0 0 2 8 1 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 1 3 10 4 25 0 1 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 1 5 17 5 31 0 1 0 4 2 0 7 6	1 0 0 0 12 17 40 15 58 5 2 2 8 25 22 33 80	1 0 0 0 1 15 28 60 32 85 10 8 2 3 11 41 36 49
Pop Est	151984	91201	243184	137702	57628	109653	124067	33631	48012	0	81643	510693	75387 <b>7</b>
Westside													
PAA 255 MAA 256 RAA 256 RAA 257 KUYX 258 KUY 259 KUN 260 KUO 261 KUP 262 KUQ 263 KUS 264 KUT 265 KUU 266 KUV 267 KUW 268 KUX 269 UYBX 270 UYEX 271 UYHX 272 UYFX 273 UYS 274 UYQX 275 UYMX 276 UYMX 277 UYMX 278 KULX 279 KUM 280 KUK 281 KUJ 282 KUI 283	16 5 0 0 0 2 11 26 1 5 26 3 4 20 0 2 4 8 1 5 2 8 2 8 3 8 1 9 2 8 1 8 2 8 8 1 8 2 8 8 2 8 8 8 8 8 8 8	57 6 2 0 0 5 16 24 10 28 18 10 1 1 0 11 6 27 3 4 2 9 0 9	73 12 2 0 8 26 26 16 28 33 36 4 4 15 28 8 6 10 2 44 170 41 74	7530002551500916621550013355144299317002218	14 6 0 0 0 0 15 1 8 0 11 34 2 1 37 0 0 0 11 2 1 0 0 0 0 15 5 1 1 1 1 1 1 1 0 0 0 0 0	12 8 2 0 0 4 7 5 3 3 8 4 0 1 1 0 22 4 0 0 1 0 0 1 1 0 0 1 1 1 0 0 1 1 0 0 0 0 1 1 0	15 3 1 0 0 6 5 8 0 7 3 3 0 4 2 0 0 14 1 0 0 1 0 0 0 1 0 0 0 1 0 0 0 0	2 0 0 0 1 0 1 0 1 0 1 0 0 0 0 0 0 0 0 0	5 1 0 0 1 0 9 1 6 1 0 0 0 1 0 0 0 0 1 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7 3 1 0 0 2 0 10 1 1 1 0 3 1 0 4 2 0 0 0 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0 0	54 24 6 0 15 32 24 17 17 32 58 4 11 67 0 4 3 56 11 4 3 9 3 117 0 64 75 58	127 36 8 0 0 23 59 50 33 45 65 94 9 16 97 71 39 12 9 19 5 11 134 116 127

-Continued-

Sta	Tow		Females	s		Suble	gal Males		Recruit	Postr	ecruit	Total	Total	Total
tion	#	Juv	Adult	Total	<70	70-91	92-114	>114		<165	>164	Legal	Male	Crab
KUG KUD	284 287	1 0	1 0	1 0	1 0	0	0	0	0	0 0	0 0	0	1	2
Pop	Est	169581	419442	589023	108716	165389	162040	136931	15092	89628	2203	106924	680001	1269024
NORTH	MAIN	LAND												
222 223 224 199 200 174 1712 1711 1711 1711 198 146 117 144 118 90 61 31 2 3 121 120	227 228 2290 2311 2332 2334 2336 2337 2339 2440 2442 2443 2445 2446 2448 2451 2448 2451 2552 2553 2554	0 14 10 0 1 10 1 3 3 0 4 5 3 1 1 0 4 2 1 0 4 2 1 0 4 2 1 0 4 4 2 1 0 4 4 1 0 4 1 0 4 1 0 4 1 0 4 1 0 4 1 0 4 1 0 4 1 0 4 1 0 4 1 0 4 1 0 4 1 0 4 1 0 4 1 0 4 1 0 4 1 0 4 1 0 4 4 4 4	0 2 2 1 0 2 3 1 0 4 0 2 11 5 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 3 26 11 0 3 12 1 3 7 0 6 16 9 2 2 2 0 4 2 1 0 3 3 1 2 2 2 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	0 4 25 9 1 2 12 2 3 1 0 9 1 3 5 1 0 4 2 1 1 2 0 4 2 1 2 0 1 2 1 2 0 1 1 1 1 2 0 1 1 1 1 2 0 1 1 1 2 0 1 2 0 1 2 0 1 2 0 1 2 0 1 2 0 1 2 0 1 2 0 1 2 0 1 2 0 1 2 0 1 2 0 1 2 2 5 2 5 2 2 5 2 5 2 2 2 5 2 2 2 5 2 2 2 5 2 5 2 2 2 2 3 2 3	0 0 1 1 1 0 0 0 0 0 1 1 3 1 0 0 0 0 0 0	0 1 1 1 1 0 0 0 0 1 2 0 0 0 0 0 0 0 0 0	0 1 1 2 0 2 4 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 1 1 0 34 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 1 1 2 1 0 0 0 0 0 1 1 3 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 1 2 3 0 0 1 1 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 526 12 3 5 18 6 3 62 0 11 5 15 6 1 0 5 2 2 0 1 1 1 2 2 0 1 1 1 2 2 0 1 1 1 2 0 1 1 1 2 0 1 1 1 2 0 1 1 1 2 0 1 1 1 2 0 1 1 1 2 0 1 1 1 2 0 1 1 1 2 0 1 1 1 2 1 2	0 9 52 23 3 8 30 7 6 6 6 9 0 17 21 24 8 2 2 0 9 9 4 4 2 1 5 3 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Pop :		626581	246765	873346	676801	133803	61118	151268	38078	49671	18653	106403	1129394	2002740
Tota		3954474	2796636	16751110	13135863	2419749	1144656	1279207	198861	455038	25620	679519	18658994	35410103

Appendix F. Numbers of king crab per 1.85 km (1 nautical mile) in 1995 in the Kodiak Management Area with population index by district.

NOTHERST    NOTHERST   Note   Note	Sta	Tow		Females	5		Sublea	al males		Recruit	Post	Total	Total	Total
K2K			Juv.			Four			One				Male	crab
CHE 3 0 5 5 5 0 0 0 0 0 1 2 2 2 3 5 5 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NORTHE	AST												
CHIE 3 0 3 3 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0		1											0	0
CHI 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0													2	8 3
NOCK   6		4											ő	0
283 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0									-				0	0
284 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0									•				0	0
255 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	284	8			_			_					ŏ	ő
255 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0								-	-		-		0	0
MOXX   12													0	0
MOLK   14	XXOM	12	0	Ō	0	0				0			0	ŏ
MOEK   15													0	0
MONX   16													0	0
KZS         18         0	MONX	16	0	0	0	0	0		Ō	0	0	0	0	0
K2D         19         0				-				•					0	0
KZJ         20         0													0	0
KZEF         22         0 <td>KZJ</td> <td>20</td> <td></td> <td></td> <td>0</td> <td>0</td> <td>0</td> <td></td> <td></td> <td>0</td> <td>0</td> <td>Ō</td> <td>Ď</td> <td>0</td>	KZJ	20			0	0	0			0	0	Ō	Ď	0
KZE         23         0													0	0
KZC         24         0			_					-	-				0	0
KZB         26         0	KZC	24	0	0	0	0	0	0	0	0	0	0	0	0
KZB         27         0		25											0	0
CHF 28		20 27											1	1
CHA 30	CHF	28	0	0	0	0	Ö	0	0	0	0		õ	Ō
CHA 31 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0													2	2
CHB 32 1 0 1 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0 0							•	-					1	2 1
395 34 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		32	1	0	1	0		-	0	2			3	4
420         35         0													0	0
421         36         0													0	0
CHK 38 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		36					_						ŏ	ŏ
CHK 39												_	0	0
CHL 40 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0													0	0
UGJ 43 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0													ő	ŏ
UGM         44         0							-	-					6	6
UGI 45 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0													. 0	0
UGG         47         0													ő	ő
486B     48     0     0     0     0     0     0     0     0     0       486B     48     0     0     0     0     0     0     0     0     0       486B     48     0     0     0     0     0     0     0     0       510B     0     0     0     0     0     0     0     0     0     0       510C     51     0     0     0     0     0     0     0     0     0       511A     52     0     0     0     0     0     0     0     0     0	UGF	46	0	0	0	•			0	0	0	_	0	0
486A     49     0     0     0     0     0     0     0     0     0       510B     50     0     0     0     0     0     0     0     0     0       510C     51     0     0     0     0     0     0     0     0     0       511A     52     0     0     0     0     0     0     0     0     0						-	-					-	0	0
510B     50     0     0     0     0     0     0     0     0     0       510C     51     0     0     0     0     0     0     0     0     0     0       511A     52     0     0     0     0     0     0     0     0     0     0							•					-	0	0
511A 52 0 0 0 0 0 0 0 0 0 0 0	510B	50	0	0	0	0	0	0	0	0	0	0	0	0
				_		•	-	_			-	•	0	0
	511A 511B	52	0	0	0	0	0	0	0	0	0	0	0	0
						-	•					-	ő	Ö
UGAB 55 0 0 0 0 0 0 0 0 0 1 1 1	UGAB	55											1 1	1 1

#### Appendix F. (page 2 of 5)

Sta	Tow		Females	<b>;</b>		Suble	gal males		Recruit	Post	Total	Total	Total
tion	#	Juv.	Adult	Total	Four	Three	Two	One	<del>-</del>	recruit	legal	Male	crab
UGC	58	0	0	0	0	0	0	0	0	0	0	O	0
UGD	59 60	0	0 <b>0</b>	0	0	0	0 0	0	0 0	0	0	0	0
UGE KLD	61	0	0	0	0	0	a	0	0	Ö	0	0	0
534B	62	0	0	0	0	0	Ö	0	0	0	0	Ō	0
534D	63	0	0	0	0	0	0	0	0	0	0	0	0
535C 535A	64 65	0 0	0	0	0	0	0	0	0	0 0	0	0 0	0 0
535B	66	ő	ő	ŏ	ŏ	Ö	ŏ	ŏ	ŏ	ő	ő	ŏ	ŏ
535D	67	0	0	0	0	0	0	0	0	0	0	0	0
561 560	68 69	0	0 0	0	0	0 0	0	0	0	0	0	0	0
588	70	ŏ	ŏ	ŏ	ő	ő	ŏ	ŏ	ŏ	Ö	ő	Ö	ŏ
620	71	0	0	0	0	0	0	0	0	0	0	0	0
655 695	72 73	0 0	0	0	0	0 0	0	0	0 0	0 0	0 0	0	0
696	74	Ö	ŏ	ő	ő	ŏ	ŏ	0	0	0	ő	ő	ŏ
656	75	0	0	0	0	0	0	0	0	0	0	0	0
621 589	76 77	0	0	0	0	0	0	0 0	0	0	0 0	<i>0</i> 0	0
559	78	ŏ	ő	ő	ŏ	ŏ	ŏ	0	ŏ	ŏ	ŏ	ŏ	Ö
587	79	0	0	0	0	0	0	0	0	0	0	0	0
619 654	80 81	0	0	0	0 0	0 0	0	0	0 0	0	0 0	0	0
KLI	85	0	ő	0	Ö	ő	Ö	ő	ő	ő	ŏ	ő	ő
KLL	86	o	0	0	0	0	0	0	0	0	0	0	0
533B 533A	87 88	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0
KLC	89	Ö	ő	ő	ő	ő	ő	ő	ŏ	ő	ő	ő	ő
KLB	90	0	0	0	0	0	o	0	0	0	0	0	0
KLA KLH	91 92	0	0	0	0	0 0	0	0	0 0	0	0	0	0
KLG	93	0	Ö	0	0	Ö	0	Ö	ő	ő	0	ő	ő
KLF	94	0	0	0	0	0	0	0	0	0	0	0	0
KLE	95	0	0	0	0	0	0	0	0	0	0	0	0
Pop 1	Est	116	7372	7489	162	0	233	465	1779	3057	4836	5696	13185
SOUTH	EAST												
618A	82	0	0	0	0	0	0	0	0	0	0	0	0
586 58 <b>5</b> X	83	0	0	0	0	0	0	0	0	0	0	0	0 0
THN	84 96	0	1	1	o o	Ö	Ö	ő	Ö	0	0	Ö	1
THM	97	Ō	0	0	0	0	Ō	0	0	1	1	. 1	1
615 651	98	0 0	0 0	0	0	0	0	0	0	0	0	0	0
729	99 100	0	Ö	0	0	0	0	0	Ö	ő	0	0	o
728	101	0	0	0	0	0	0	0	0	0	Ō	0	0
	102	0	0	0	0	0 0	0	0	0 0	0 0	0	0	0
760 THA	103 104	<b>o</b> 0	0	0	0	0	0	0	0	0	0	0	0
614	105	ő	0	ő	Q	0	ŏ	0	Ō	0	ō	Ó	0
	106	0	0	0	0	0	0	0	0	0	0	0	0
	107 108	0	0 0	0	0	0	0 0	0 0	0 0	0	0 0	0	0 0
THK		0	ő	Ö	ő	o o	ő	ő	ő	ő	ŏ	ő	ő

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### Appendix F. (page 3 of 5)

Sta	Tow		Females			Suble	gal males		Recruit	Post	Total	Total	Total
tion	#	Juv.	Adult	Total	Four	Three	Two	One		recruit	legal	Male	crab
THJ	110	0	0	0	0	0	0	0	0	0	0	0	0
THG	111	0	0	Ō	0	0	0	0	0	0	0	0	0
688	112	0	0	0	0	0	0	0	0	0	0	0	0
726	113	0	0	0	0	0	0	0	0	0	0	0	0
727	114	0	0	0	0	0	0	0	0	o o	O.	0	0
759	115	0	0	0	0	0	0	0	0	0	0	0	0
725	116	0	0	0	0	0	0	0	0	0	0	0	0
THH	117	0	0 0	0	0	0	0 0	0	0	1	1	1	1 0
THI	118 119	0	0	0 0	0	0	0	0	0	0	0	0	0
Pop	Est	0	456	456	0	0	0	0	0	1322	1322	1322	177 <b>7</b>
SOUTH	WEST												
684B 684C	120 121	0 0	0	0 0	0 0	0	0 0	0	0	0	0	0	0
684A	122	0	0	0	0	0	0	0	0	0	0	0	0
646D	123	ő	0	Ö	ő	0	ő	Ö	ő	ő	Ô	ő	0
	124	ŏ	Ö	Ö	Ö	Ö	ŏ	ő	ŏ	ŏ	ŏ	ő	ŏ
646A	125	Ö	Ö	ŏ	Ö	ō	Ō	Ō	Ö	ŏ	ŏ	ō	č
645B	126	0	0	0	0	0	0	0	0	0	0	0	0
46C	127	0	0	0	0	0	0	0	0	0	0	0	0
82B	128	0	0	0	0	0	0	0	0	0	0	0	0
	129	0	0	0	0	0	0	0	0	0	0	0	0
	130	0	0	0	0	0	1	0	0	0	0	1	1
	131	0	0	0	0	0	0	0	0	0	0	0	0
X80	132	0	0 0	0 0	0	0	0 0	0	0	0 0	0	0	0
578X 577X	133 134	0	0	0	0	0 0	0	ő	0	0	o	0	0
	135	0	0	o o	ő	Ö	0	ő	ő	ő	0	0	Ö
	136	ő	ő	ő	Ö	ŏ	ŏ	ő	ŏ	ŏ	Õ	ő	Ö
48X		ő	ŏ	ŏ	ŏ	ŏ	Ö	ŏ	Ö	ō	Ö	ŏ	ō
781X		Ō	Ö	Ŏ	ō	0	Ō	Ō	Ō	Ō	0	Ō	ō
	139	0	0	0	0	0	0	0	0	0	0	0	0
15X	140	0	0	0	0	0	0	0	0	0	0	0	0
16X	141	0	0	0	0	0	0	0	0	0	0	0	0
ALB	142	0	0	0	0	0	0	0	0	0	0	0	0
ALD	143	0	0	0	0	0	0	0	0	0	0	0	C
ALF	144	0	0	0	0	0	0	0	0	0	0	0	0
ALH ALI	145 146	0 0	0	0	0 0	0	0	0	0	0	0	0	
ALA	147	0	10	10	0	0	0	0	0	0	0	0	10
	148	Ö	0	0	0	0	0	Ö	0	1	1	1	1
	149	0	ĺ	1	ő	1	ő	Ö	ő	Ô	0	. 1	2
ALJ	150	ŏ	ō	ō	Õ	ō	ŏ	ő	ĭ	ő	ĭ	ī	ĩ
	151	ŏ	ő	ō	ō	Ō	0	0	ō	ō	ō	ō	ō
ALM	152	Ō	0	Ō	Ō	0	0	0	0	0	0	0	0
	153	0	0	0	0	0	0	0	0	0	0	0	0
	154	0	0	0	0	0	0	0	0	0	0	0	0
	155	0	0	0	0	0	0	0	0	0	0	0	C
	156	1	0	1	0	0	0	0	0	0	0	0	1
ALL	157	0	0	0	0	0	0	0	0	0	0	0	0
Pop E	7st	1063	4223	5286	0	881	927	0	668	360	1028	2836	8122

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# Appendix F. (page 4of 5)

Sta	Tow		Females			Suble	ral males		Recruit	Post	Total	Total	Total
tion	#	Ju∨.	Adult	Total	Four	Three	Two	0ne	<del></del>	recruit	legal	Male	crab
SHEL	IKOF												
222		0	0	Q	0	0	0	0	0	0	0	0	0
223	228	0	0	0	0	0	0	0	0	0	0	0	0
224 199		0	0 0	0	0	0	0 0	0	0	0	0	0	0
200		0	0	Ö	0	Ö	0	0	ŏ	ő	ő	ő	ő
174		Ō	ō	ō	0	0	0	0	0	Ō	0	0	. 0
173	233	0	0	0	0	0	Ō	0	0	0	0	0	0
172		0 0	0	0	0	0 0	0 0	0 0	0 1	0	0 1	0	0 1
171 171X	235 236	0	0	0	0	0	0	0	0	0	0	Ö	0
171Y		ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	Õ	ő
198	238	0	0	0	0	0	0	0	0	0	0	0	0
147	239	0	0	0	0	0	0	0	0	0	0	0	0
146 117	240 241	0 0	0	0	0	0 0	ზ 0	0 0	0	0	0	0	0
145	242	0	0	0	ő	ő	ő	0	0	0	0	Õ	0
144	243	Ō	Õ	ō	0	Ō	ō	Ō	Ō	Ō	Ō	0	Ō
118	244	0	0	0	0	0	Ō	0	0	0	0	0	0
90	245	0	0	0	0	0 0	0	0	0	0	0	0	0
91 60	246 247	0	0 0	0	0 0	0	0 0	0	0 0	0	0	0	0
61	248	0	0	Ö	0	0	o	ő	0	0	0	ő	0
31	249	0	Ō	Ō	0	0	Ō	Ö	Ō	Ō	0	Ó	0
2	250	0	0	0	0	0	0	0	0	0	0	Ō	0
3	251	0	0	0	0	0	0	0	0	0	0	0	0
121 120	252 253	0	0	0	0 0	0	0 0	0	0	0	0	0	0
119	254	Ö	Ö	Ö	ů	Ö	ő	ő	Õ	ő	ő	ő	Ö
PAA	255	0	0	0	٥	0	0	0	0	0	0	0	0
MAA	256	0	0	0	0	0	0	0	0	0	0	0	0
RAA KUYX	257 258	0	0	0 0	0	1 0	0	0	1	0	1 0	1 0	1 0
KUY	259	0	Ö	0	ů	Ö	0	0	0	0	o	0	0
KUN	260	ő	ĭ	ĭ	ŏ	ŏ	Õ	ŏ	ŏ	ő	ő	ő	ĭ
KUO	261	0	٥	0	0	0	0	0	0	0	0	0	0
KUP	262	0	0	0	0	0	0	0 0	0	0	0	0	0
KUQ KUS	263 264	0	0 0	0 0	0 0	0 0	0	0	0	0 0	0	0	0
KUT	265	ŏ	å	ő	o o	ů	Ö	ŏ	ő	Õ	Ö	ő	ŏ
KUU	266	0	0	0	ō	Ö	Ö	Ď	Ö	0	Ö	ō	0
KUV	267	0	0	0	0	0	0	0	0	0	0	0	0
KUW	268	0	2	2	0	1	0	0 0	0 0	0	0	. 1	3 2
KUX UYBX	269 270	0 0	1 0	1 0	0	0	0	0	0	0	0 0	0	0
UYEX	271	ő	Ö	Ö	ő	ŏ	ŏ	ŏ	ő	ő	ŏ	ŏ	ŏ
UYHX	272	0	0	0	Ō	0	Ō	Ō	0	0	0	0	0
UYFX	273	0	0	0	0	0	0	0	0	0	0	0	0
UYS	274	0	0	0	0	0	0	0	1 0	0	1 0	1 0	1 0
UYQX UYMX	275 276	0	0	0 0	0	0	0	0	0	0	0	0	0
	277	ő	ő	Ö	ő	ŏ	Ö	ŏ	Ö	ő	ő	ŏ	ő
UYO	278	0	0	Ō	0	0	0	0	0	Ō	0	0	0
KULX	279	0	0	0	0	0	0	0	0	0	0	0	0

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### Appendix F. (page 5 of 5)

Sta	Tow	_	Female	s		Suble	gal males		Recruit	Post	Total	Total	Total
tion	#	Juv.	Adult	Total	Four	Three	Two	One		recruit	legal	Male	crab
KUM	280	0	0	0	0	0	0	0	0	0	0	0	0
KUK	281	0	0	0	0	0	0	0	0	0	0	0	0
KUJ	282	0	0	0	0	0	0	0	0	0	0	0	0
KUI	283	0	0	0	0	0	0	0	0	0	0	0	0
KUG	284	0	Ō	0	0	0	0	0	0	0	0	0	0
KUF	285	0	0	0	0	0	0	0	0	0	0	0	0
KUE	286	Ō	Ō	0	O	0	0	0	0	0	0	0	0
KUD	287	Ō	0	0	0	0	0	0	Ó	0	0	0	0
Pop	Est	0	1135	1135	0	756	402	0	2115	0	2115	3273	4408
Gran	d Total	1180	13186	14366	162	1637	1561	465	4563	4738	9301	13127	27492

Appendix G.1 Arrowtooth lengths (cms) by area from a trawl survey of the Kodiak Area, 1995.

Length	T								Δ	rea Gr	oup								
(cm)	1	2	3	4	5	6	7	10	<b>1</b> 1	12	13	14	15	16	17	18	19	20	Totals
9	0	0	0	2	0	0	0	0	1	1	0	0	0	0	0	0	0	0	4
10	1 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
12	2	0	0	5	0	0	0	0	0	2	0	0	0	0	0	1	0	0	10
13	1	0	0	4	0	0	0	5	1	1	0	0	0	0	0	2	0	0	14
14	2	0	0	0	0	2	0	5	1	0	1	0	0	0	2	0	0	1	14
15	0	0	0	0	0	0	0	9	0	0	2	0	0	0	2	0	0	0	13
16	2	0	0	0	0	0	0	4	0	0	1	0	0	0	0	0	0	0	7
17	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	3
18	0	0	0	5	1	0	0	1	0	0	1	0	0	0	0	0	0	0	8
19 20	0 3	0	0	4 5	0 0	0	1	0 2	0	0 1	2 0	0 0	0	0	0 1	3 8	0 0	0	10 20
21	4	0	0	6	2	0	0	0	0	1	1	0	0	0	i	14	0	0	29
22	7	0	Ö	11	Õ	Ö	ő	2	Ö	1 .	2	1	Ö	Ö	3	14	Ö	1	36
23	6	ő	1	14	2	2	ŏ	3	Ö	ó	1	i	Ö	ŏ	6	8	Ö	i	45
24	111	ō	1	6	3	0	ō	3	ō	ō	1	0	Ö	Ō	5	6	Ö	1	37
25	6	0	3	16	4	2	1	3	0	1	1	1	0	0	10	3	0	1	52
26	5	0	1	2	2	5	1	4	1	1	0	0	0	0	4	0	0	1	27
27	12	0	0	11	3	0	0	5	4	2	2	0	0	1	5	0	0	3	48
28	10	0	0	7	2	1	0	2	0	1	2	0	1	0	6	0	0	2	34
29	15	0	2	12	1	0	2	1	2	1	3	0	0	0	4	2	0	1	46
30	15	1	4	23	8	0	2	4	1	3	4	3	1	0	2	2	0	2	75
31	8	2	5	25	12	1	3	6	4	3	0	1	4	0	2	1	0	3	80
32	18	0	2	29	13	1	1	6	6	2	0	0	7	0	2	3	0	1	91
33	16	1	4	23 25	12 9	0	2	4 6	4 5	3 4	2 3	2	7 9	0	2 3	3 2	1 0	5 4	91 96
34 35	18 24	2 2	2 3	25 40	9 16	1 0	0 3	5	3	3	ა 6	3 3	2	0	4	3	0	4	121
36	21	2	4	32	12	3	3	8	1	2	4	2	2	1	1	3	0	4	105
37	15	2	4	27	8	1	4	5	Ö	4	2	1	3	Ó	1	4	1	5	87
38	15	2	6	34	11	1	2	1	3	2	2	4	1	1	3	5	Ö	4	97
39	13	4	3	32	4	1	5	1	3	3	2	0	3	0	2	6	3	3	88
40	10	1	3	26	9	1	0	3	3	1	2	3	3	0	2	10	2	2	81
41	17	1	0	25	6	1	1	2	0	1	1	2	2	1	1	7	0	0	68
42	16	1	1	28	5	0	2	3	1	3	1	1	4	0	0	8	1	2	77
43	19	3	5	24	2	0	1	4	0	3	1	1	0	1	2	4	0	2	72
44	17	1	5	17	1	1	5	1	0	3	0	2	3	0	1	4	1	1	63
45	11	1	4	10	6	4	3	2	0	1	0	1	0	1	0	10	1	0	55
46	13	0	1	8	1	3	5	2	0	3	4	0	1	3	1	4	1	0	50 .
47	20	5	2	13	1	2	4	1	0	1	2	0	2	0	0	7	1	1	62
48	11	3	3	18	2	0	4	1	2	2	2	1	0	1	4	4	1	3	62
49 50	19	2 2	2 6	15 11	3 5	1 2	4 3	1 0	4 2	1 7	1	0 2	4 0	1 0	2 0	6 12	2 2	0 4	68 70
50	11				<u> </u>		<u> </u>	<u> </u>			!		v	U	U	12		4	70

Appendix G.1 (page 2 of 2)

51         7         2         2         12         3         2         2         1         3         1         4         2         4         0         2         4         4         4         59           52         9         5         4         16         5         0         6         2         4         1         2         7         2         0         72         2         0         72         2         0         72         2         0         72         2         0         72         2         0         72         2         0         72         2         0         72         2         0         72         1         1         4         2         2         4         4         2         2         54         4         2         2         54         4         2         2         54         4         2         2         3         1         2         2         2         1         1         4         4         2         1         4         2         4         4         4         4         4         4         4         4         4         4         4	Length	T									Area Gr	oup								
52         9         5         4         16         5         0         6         2         4         1         2         2         4         1         2         2         4         1         2         7         2         0         72         53         7         3         1         16         1         4         0         1         2         1         16         1         4         0         1         2         2         3         2         4         2         2         3         1         4         2         2         3         1         2         2         2         0         2         1         1         4         3         1         4         2         2         2         1         1         4         3         1         4         2         2         2         1         1         4         3         1         4         2         1         4         4         1         0         0         0         2         2         1         1         4         4         1         0         0         2         2         1         1         4         2         1 </td <td>(cm)</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>10</td> <td>11</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>Totals</td>	(cm)	1	2	3	4	5	6	7	10	11	12	13	14	15	16	17	18	19	20	Totals
53         7         3         1         16         1         4         0         1         2         1         1         2         2         3         2         4         2         2         54         54         5         2         1         16         1         3         1         0         0         1         1         0         1         0         0         2         7         1         1         43         3         1         2         2         2         0         2         1         1         1         43         3         1         4         2         2         2         1         1         1         4         3         1         4         4         4         4         4         4         2         1         0         1         1         0         1         0         1         6         1         2         4         4         2         1         0         1         2         1         0         0         0         0         0         0         2         2         1         1         4         2         2         4         4         2         1<	51	7	2	2	12	3	2	2	1	3	1	4	2	4	0	2	4	4	4	59
54         5         2         1         16         1         3         1         0         0         1         1         0         2         7         1         1         43           55         8         2         0         14         2         2         3         1         2         0         2         1         3         1         2         0         47         48         2         47         41         43         1         40         47         48         47         56         5         3         0         10         3         1         1         0         0         1         0         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         4         2         1         4         2         1         4         2         1         0	52	9	5	4	16	5	0	6	2	4	1	2	2	4	1	2	7	2	0	72
55         8         2         0         14         2         2         3         1         2         2         2         0         2         1         3         1         2         0         47         56         5         3         0         10         3         1         1         0         0         2         2         2         1         1         1         4         3         1         40         3         1         40         0<	53	7	3	1	16	1	4	0	1	2	1	1	2	2	3	2	4	2	2	54
56         5         3         0         10         3         1         1         0         0         2         2         2         1         1         1         4         3         1         40           57         7         3         0         9         5         1         2         1         0         1         0         1         0         1         6         1         2         41           58         7         5         0         2         4         0         0         0         0         0         0         0         0         2         2         1         1         2         41         0         1         2         1         0         2         2         1         1         2         41         0         2         2         1         1         2         2         0         2         2         1         1         2         2         0         2         2         2         0         2         2         2         0         2         2         2         0         2         0         2         2         2         0         0         0	54	5	2	1	16	1	3	1	0	0	1	1	0	1	0	2	7	1	1	43
57         7         3         0         9         5         1         2         1         0         1         1         0         1         0         1         6         1         2         41         58         7         5         0         2         4         0         0         0         0         0         0         0         0         0         2         0         1         1         1         0         2         2         2         0         0         1         1         1         0         0         0         0         0         0         0	55	8	2	0	14	2	2	3	1	2	2	2	0	2	1	3	1	2	0	47
58         7         5         0         2         4         0         0         0         0         2         3         0         0         0         0         2         0         0         2         0         0         0         2         0         0         0         2         0         0         0         2         0         0         0         0         0         2         0	56	5	3	0	10	3	1	1	0	0	2	2	2	1	1	1	4	3	1	
59         3         2         1         4         2         1         0         1         2         1         0         2         2         1         1         2         2         0         2         2         1         1         2         2         0         2         2         1         1         0         2         2         1         1         0         2         2         2         0         2         2         2         0         2         2         2         0         2         2         2         0         2         2         2         0         2         2         2         0         2         2         2         0         2         2         2         0         0         2         2         2         0         0         2         2         2         0         0         2         2         2         1         0         0         0         1         1         1         0         2         2         2         0         1         1         1         1         0         0         1         1         1         1         0         0         1	57	7	3	0	9	5	1	2	1		•		0	1		1		1		
60         7         0         0         3         5         1         1         0         0         3         2         0         3         0         1         0         1         0         27         61         4         2         0         3         1         0         1         1         2         2         0         1         1         0         2         2         2         0         24         62         6         0         0         3         2         2         1         2         3         0         29         2         2         0         24         62         6         0         0         3         2         2         1         0         1         1         1         0         2         2         2         1         0         1         1         1         0         2         2         2         1         0         0         1         1         1         0         2         2         0         1         1         1         0         2         0         1         0         1         0         1         0         1         0         1         0	58	7	5	0	2	4	0	0	0		2	3	0		0	0			0	
61	59	3	2	1	4		1	0	1			-	2			1				
62	60	7		0	3	5	1	1	0				0	3		1				
63		4	2	0	3	1		1	•			0	1	1	-	2				
64		ı	0		3			1					0	1		1				
65			1										1			1			-	
66					5	0						•								
67		1 .										1				•				
68         1         1         1         2         3         0         0         0         0         0         1         2         0         1         0         0         2         0         14         69         1         2         2         5         1         0         4         0         0         1         1         0         0         1         0         0         1         0         0         0         1         0         0         0         1         0         0         0         1         0         0         0         1         0         0         0         0         1         0												-			-					
69         1         2         2         5         1         0         4         0         0         1         1         0         0         1         0         0         1         0         0         1         0         0         0         1         0         0         0         0         1         0         0         0         0         0         1         0			-								-						_			
70         3         1         0         3         2         0         2         0         1         0         1         1         0				-		-	-		-			1				-	_			
71									-	-	•	1	-			_				
72         1         1         0         3         0	-	1 -	-		-															
73         1         3         1         1         0				-								_				-	-			
74         3         1         0         2         1         1         1         0		1 .				_	_	-	-	-		_	-	-		-			_	
75         0         2         0         1         0         1         0				-		-	0				-	_	_	-			_			
76         0		1					1		-		~	-	-	-	-	-				
77		_						_	_	-	•	-	-	-	-	_	-	_	_	
78		_	-			0	-	-	-				-	-	_	_	-	-		
79 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0						1	-	-	-		-	-	-	_	-	_		-	-	
81 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			_			_	_	-	-					-	-	_				
82				_		-	-				-	-	-			-	_	_		
83 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		-					-				-	_			-	-	-	-	-	•
84 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1		¦	_				-		-	-	_	_	-	-	-	-	-	-	_	1
		1 ,	1	-	-	-	-		-		-	-	-	_	_	-	_	-	-	1
	04	514	89	93	746	213	59	94	127	77	98	91	51	87	20	106	226	51	76	2818

- 1. Shelikof
- 2. Marmot offshore
- 3. Chiniak offshore
- 4. Barnabas
- 5. Twoheaded
- 6. Alitak flats
- 7. Geese Islands
- 10. Alitak Bay
- 11. Chiniak Bay

- 12. Kiliuda Bay
- 13. Kupreanof-Viekoda
- 14. Uganik Bay
- 15. Inner Marmot Bay
- 16. Malina-Raspberry
- 17. Ugak Bay
- 18. Southwest offshore
- 19. Marmot-Izhut Bay
- 20. Uyak Bay

Appendix G. 2 Halibut lengths (cm) from a trawl survey of the Kodiak area, 1995.

Length										Area Gr	oup								
(cm)	1	2	3	4	5	6	7	10	11	12	13	14	15	16	17	18	19	20	Totals
18	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
26	0	ō	0	0	0	Ō	0	Ō	2	0	0	0	0	0	0	0	Ó	0	2
27	0	0	0	0	0	0	0	0	1	2	0	0	0	0	1	0	0	0	4
28	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3
29	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
30	0	0	0	0	О	0	0	0	0	4	0	0	0	0	0	0	0	0	4
31	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
32	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	3
34	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
35	0	0	0	0	0	0	0	2 0	1	1	0	0	0	0	0	0	0	0	4
36 37	0	0	0	0 0	0	0	0	1	1 0	1 1	0	0	0 0	0	0	0 0	0	0	2 3
38	0	0 0	0	0	0	0	0	2	0	2	1 0	0	0	0	0	0	0	0	4
39	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	Ö	2
40	1	0	0	0	0	Ö	0	Ö	1	1	ő	0	1	0	1	1	Ö	0	6
41	Ö	Ö	0	Ö	Ö	ō	Ö	0	Ö	i	Ö	0	o .	0	ò	Ö	Õ	Ö	1
42	1	ō	ō	Ō	Ö	ō	Ō	ō	ō	Ó	Ō	ō	ō	ō	0	ō	Ō	0	1
43	0	0	0	1	0	1	0	0	0	0	2	0	0	0	0	0	0	0	4
44	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	4
45	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3
46	0	0	0	0	0	3	0	0	0	0	1	0	0	0	0	0	0	0	4
47	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	1	0	1	5
48	0	0	0	3	0	0	0	0	0	1	0	0	0	0	1	1	0	0	6
49	0	0	0	3	0	0	0	0	0	0	1	0	0	0	2	0	0	0	6
50	0	0	0	2	0	1	0	1	1	1	0	0	0	0	1	0	0	0	7
51	0	0	0	0	1	2	0	1	0	0	1	1	1	0	0	3	0	0	10
52	0	0	0	3	1	2	0	1	0	1	0	0	0	0	0	0	0	0	8 15
53 54	1 1	0	0 0	4 0	1 0	3 0	0	0	0	3 1	2 0	0 0	0 0	0	1 0	0 2	0	0	4
54 55	1	0 0	0	0	0	2	0	3	0	Ö	0	0	1	0	0	0	0	0	7
56	1	0	0	1	1	0	0	0	0	0	4	0	Ó	Ö	0	0	0	1	8
57	o	0	0	4	1	1	Ö	1	1	Õ	1	0	0	0	Ö	1	o o	Ö	10
58	3	0	Ö	5	1	1	0	Ö	2	ő	ò	0	0	Ö	Ö	1	Ō	1	14
59	ō	ō	ō	2	Ö	1	0	ŏ	1	ō	2	ō	ō	Ö	1	Ó	ō	1	8
60	0	Ō	Ō	4	0	0	0	0	1	1	1	0	0	0	1	0	0	0	8
61	1	0	0	4	1	0	0	0	1	0	0	0	1	0	0	2	0	0	10
62	0	0	0	4	0	1	0	2	2	1	0	0	2	0	0	0	1	1	14
63	2	0	0	4	1	2	0	1	0	1	0	0	2	0	0	1	0	0	14
64	1	0	0	4	2	2	0	0	1	1	0	0	2	0	1	1	0	0	15
65	2	0	0	1	2	4	0	1	2	1	0	0	1	0	0	0	0	2	16
66	5	0	0	3	0	0	0	0	3	3	0	0	1	0	0	3	0	0	18
67	1	0	0	1	0	2	0	1	0	0	1	0	3	0	0	0	0	0	9
68	2	0	0	6	1	2	0	1	0	2	_1	0	1	0	0	2	0	1	19

Appendix G.2 (page 2 of 3)

Length	<del></del>									rea Gr	oup								
(cm)	1	2	3	4	5	6	7	10	11	12	13	14	15	16	17	18	19	20	Totals
69	1	1	0	3	2	1	2	0	1	1	1	1	1	0	0	2	0	0	17
70	2	Ó	Ō	1	1	4	0	Ō	6	Ó	1	1	3	0	0	2	1	0	22
71	0	0	0	4	0	2	0	0	4	1	1	0	0	0	0	2	0	0	14
72	1	0	1	6	3	3	0	0	4	3	0	0	3	0	2	1	1	0	28
73	5	1	0	4	0	1	1	1	1	0	1	0	2	0	0	0	0	0	17
74	1	0	0	5	0	2	0	1	1	О	0	0	1	0	1	1	1	0	14
75	0	1	0	3	1	2	0	1	3	1	1	0	0	0	0	3	0	0	16
76	1	1	0	3	1	1	2	1	5	1	1	0	0	0	1	2	0	1	21
77	1	0	0	2	0	3	1	2	4	1	2	0	0	0	0	1	0	0	17
78	2	1	0	2	2	2	3	1	3	0	0	0	0	1	0	1	0	0	18
79	2	3	0	3	0	0	3	0	2	0	0	1 0	1 0	0 0	1 0	2 1	1 0	1 0	20 14
80 81	1 2	1 0	1 0	1 2	2 0	1 0	1 0	0 0	4 0	0 0	1 0	0	0	0	0	2	0	0	6
82	0	2	2	4	0	5	0	0	1	0	0	0	2	1	0	2	0	0	19
83	2	3	0	5	0	5	1	1	0	1	1	1	0	o	Ö	1	1	0	22
84	2	1	Õ	2	0	3	2	Ö	4	Ö	Ö	ò	Ö	0	Ö	1	1	Õ	16
85	2	3	Ö	2	3	2	0	ō	2	ō	ō	ō	1	Ō	0	0	ó	0	15
86	0	1	0	1	0	2	1	1	4	0	0	0	0	0	0	3	0	1	14
87	0	3	2	6	0	2	1	1	2	0	0	1	1	1	0	1	0	0	21
88	1	1	2	2	3	2	5	0	1	0	0	0	0	0	1	1	0	0	19
89	1	3	1	3	0	1	2	2	3	2	2	0	1	0	0	0	0	0	21
90	0	2	0	2	1	3	0	1	5	1	0	2	1	0	0	1	0	1	20
91	0	1	1	1	0	3	1	1	1	0	0	0	0	0	0	0	0	0	9
92	1	3	1	1	0	2	1	2	5	2	0	0	0	0	1	0	0	0	19
93	1	1	0	0	2	1	3	0	3	0	3	1	0	0	0	0	0	0	15
94	0	0	0	3	0	1	1	0	4	0	0	0	0	0	0	0	0	1	10
95	1	1	0	3 3	0	3	1 2	0	2	1 0	2 0	0	0 0	0 0	0 1	1	1 0	2 0	18 15
96 97	1 0	1	2 1	3	0	3 1	1	0	1 1	0	0	1	0	0	Ó	0	2	0	11
97 98	0	0	0	4	0	3	1	0	1	3	0	Ó	0	0	0	0	0	0	12
99	0	0	0	1	1	3	1	0	3	0	Ö	Ö	0	0	Ö	2	o	Ö	11
100	0	1	0	Ö	i	3	ò	Ö	2	0	0	0	ō	0	Ö	ō	ō	Ö	7
101	1	3	ō	2	Ó	1	Ŏ	1	2	0	Ō	0	0	Ō	0	0	0	2	12
102	Ö	1	Ō	1	1	1	ō	Ó	1	Ō	1	0	0	0	0	1	1	0	8
103	0	1	0	4	1	2	2	0	1	0	1	2	1	0	0	0	0	0	15
104	0	1	0	0	2	2	0	0	0	0	1	0	1	2	0	0	0	0	9
105	0	2	0	1	0	1	1	0	0	0	0	0	1	0	0	0	1	1	8
106	1	0	0	2	0	1	0	0	0	0	1	0	0	0	0	0	0	0	5
107	0	0	0	2	0	0	1	0	1	0	2	1	0	0	0	0	0	0	7
108	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
109	0	0	0	0	1	1	1	0	0	0	0	0	1	0	0	0	0	1	5
110_	2	1	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	6

-Continued-

Appendix G.2 (page 3 of 3)

Length									, P	rea Gr	oup								
(cm)	1	2	3	4	5	6	7	10	11	12	13	14	15	16	17	18	19	20	Totals
111	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
112	0	0	0	1	0	1	2	3	0	0	0	0	0	0	0	0	0	0	7
113	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
114	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	3
115	0	0	0	1	0	1	0	0	0	0	1	0	0	0	1	0	0	0	4
116	1	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	4
118	0	0	0	2	1	0	0	0	0	0	0	1	0	0	0	0	0	1	5
119	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	1	0	4
120	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	1	4
121	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	1	0	4
123	0	0	1	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	5
124	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
125	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
126	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	2
127	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
128	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
130	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
131	0	0	δ	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	3
133	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
134	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2
135	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
136	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
137	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
138	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
140	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	2
143	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
146	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
149	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
150	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
159	0	0	0	0	0	1	0	0	0	0	0	0	0	00	0	0	0	0	1
	66	46	15	165	44	126	50	44	113	72	46	15	41	5	19	56	15	22	960

- 1. Shelikof
- 2. Marmot offshore
- 3. Chiniak offshore
- 4. Barnabas
- 5. Twoheaded
- 6. Alitak flats
- 7. Geese Islands
- 10. Alitak Bay
- 11. Chiniak Bay

- 12. Kiliuda Bay
- 13. Kupreanof-Viekoda
- 14. Uganik Bay
- 15. Inner Marmot Bay
- 16. Malina-Raspberry
- 17. Ugak Bay
- 18. Southwest offshore
- 19. Marmot-Izhut Bay
- 20. Uyak Bay

Appendix G.3 Flathead sole lengths (cms) from a trawl survey of the Kodiak area, 1995.

Length									Aı	rea Gr	oup			·					
(cm)_	1	2	3	4	5	6	7	10	11	12	13	14	15	16	17	18	19	20	Totals
7	0	0	0	2	0	0	0	0	0	2	1	0	0	0	0	0	0	0	5
8	0	0	0	0	1	0	1	0	0	2	0	0	1	0	0	0	0	2	7
9	6	0	0	4	1	2	2	4	2	1	1	0	1	0	2	0	. 0	5	31
10	11	0	0	2	4	1	0	3	1	2	2	0	0	0	5	0	0	1	32
11	17	0	0	6	2	2	2	3	2	4	0	0	0	0	6	0	0	1	45
12	7	0	0	10	7	2	1	1	1	7	1	0	1	0	2	1	0	2	43
13	8	0	0	5	3	9	4	1	1	3	0	1	6	0	5	0	0	3	49
14	15	0	0	5	6	6	1	3	2	3	1	3	6	0	6	2	0	2	61 57
15 16	13	0 2	1 2	7 9	4 1	8 6	4 4	0 1	4 3	1 2	1	2 5	6 4	0	1 4	0 2	1	5 7	57 66
16 17	11 12	0	3	9 11	5	2	7	Ö	8	0	1	5	3	Ö	2	1	1	6	67
18	9	1	3	11	5	4	7	0	1	1	1	5	3	1	4	Ö	Ö	9	65
19	9	6	1	10	10	3	10	3	1	3	2	13	7	2	5	Ö	Ö	6	91
20	6	1	Ö	21	12	2	5	7	4	3	1	13	7	2	6	1	3	4	98
21	8	3	0	19	7	8	11	4	5	1	4	4	8	1	6	2	0	8	99
22	4	0	0	24	12	13	5	8	7	1	4	3	8	0	1	1	0	8	99
23	9	5	0	26	10	16	8	7	7	4	4	7	3	1	2	0	0	6	115
24	9	8	0	24	12	9	5	7	7	1	2	6	4	2	5	2	0	8	111
25	7	4	0	23	11	3	9	6	7	7	6	6	9	1	4	0	1	8	112
26	8	3	1	20	12	6	10	12	9	3	9	11	11	0	7	0	0	4	126
27	9	0	0	15	17	7	8	19	11	5	6	4	5	2	4	0	0	9	121
28	6	4	1	30	13	8	14	23	10	4	12	13	14	2	3	1	1	14	173
29 20	17	3	3	21	18	18 16	16 11	30 40	12	7 9	12 19	12 17	21 32	2 0	12 10	1 3	2 3	19 10	226 248
30 31	14 33	2 5	2 2	18 30	21 16	17	8	32	21 22	12	14	24	28	5	8	5	4	20	285
32	26	2	1	31	24	21	13	33	29	19	11	15	27	8	9	4	6	14	293
33	43	8	3	41	30	25	9	22	27	13	11	22	19	7	14	6	8	10	318
34	41	10	2	18	17	19	8	15	25	21	12	19	15	5	13	9	10	11	270
35	42	12	5	24	20	19	12	19	18	14	13	12	19	4	19	6	3	8	269
36	28	7	3	13	15	17	13	15	11	16	17	15	22	7	6	11	10	6	232
37	32	2	3	11	10	15	7	21	13	12	15	16	9	5	7	0	6	8	192
38	32	3	0	18	10	13	1	8	7	7	7	10	13	3	8	7	11	8	166
39	18	1	0	1	3	5	6	4	10	14	4	12	12	4	12	5	6	4	121
40	8	0	2	5	6	4	1	4	7	8	1	7	10	0	11	1	4	0	79
41	6	0	2	2	6	2	3	1	4 4	6	4	1	2	2	7	3	3 4	1	55 48
42 43	2 3	0	0	2 2	6 1	1	2 2	1 1	1	3 2	1 0	2 2	5 2	3 1	7 6	5 0	3	0	48 27
43 44	2	0	0	2	4	1	2	1	Ö	3	0	2	0	Ö	2	1	3	0	23
45	1	0	0	0	1	Ö	1	ò	0	0	0	0	0	0	3	Ö	0	0	6
46	ò	0	Ö	1	Ö	Ö	1	Ö	1	Ö	Ö	0	0	0	1	2	Ö	0	6
47	Ö	Ö	Ö	1	Ō	Ö	0	Ō	1	Ö	1	Ö	0	Ö	Ó	1	Ö	Ö	4
48	Ō	0	Ō	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
49	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	3
50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
51	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
	532	93	41	525	363	311	234	359	307	226	203	289	343	71	239	83	93	237	4549

- 1. Shelikof
- 2. Marmot offshore
- 3. Chiniak offshore
- 4. Barnabas
- 5. Twoheaded
- 6. Alitak flats
- 7. Geese Islands
- 10. Alitak Bay
- 11. Chiniak Bay
- 12. Kiliuda Bay
- 13. Kupreanof-Viekoda
- 14. Uganik Bay

- 15. Inner Marmot Bay
- 16. Malina-Raspberry
- 17. Ugak Bay
- 18. Southwest offshore
- 19. Marmot-Izhut Bay
- 20. Uyak Bay

Appendix G.4. English sole lengths (cms) from a trawl survey of the Kodiak area, 1995.

Length		Ar	ea Grou	Jp	
(cm)	4	14	17	20	Totals
34	1	0	0	0	1
40	0	0	1	0	1
41	1	0	0	0	1
42	1	0	0	0	1
43	1	0	0	0	1
44	1	0	0	0	1
45	1	0	0	0	1
49	0	0	0	1	1
50	0	0	0	1	1
51	0	1	0	0	1
52	0	0	0	3	3
53	0	1	0	0	1
54	0	1	0	1	2
58	0	_1	0	0	1
	6	4	1	6	17

4. Barnabas

17. Ugak Bay

14. Uganik Bay 20. Uyak Bay

Appendix G.5. Dover Sole lengths (cms) from a trawl survey of the Kodiak area, 1995.

Length							Α	rea Gro	oup						
(cm)	1	2	3	4	5	10	12	13	14	15	16	18	19	20	Totals
30	2	0	0	0	0	0	0	1	0	0	0	0	0	0	3
31	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
32	1	0	0	0	0	1	0	0	0	0	0	0	0	0	2
33	0	0	1	0	0	0	0	0	0	0	0	0	2	0	3
34	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
38	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
39	0	0	1	0	0	0	0	1	0	0	0	0	0	1	3
40	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
41	0	0	0	1	0	0	0	0	0	0	1	1	0	0	3
42	0	0	1	0	0	0	0	2	0	0	0	0	0	0	3
43	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
44	0	0	0	2	0	0	0	2	0	1	0	0	0	2	7
45	0	0	0	1	0	0	0	0	0	0	2	0	0	0	3
46	1	0	0	0	0	1	0	0	0	0	0	1	1	1	5
47	1	0	0	0	0	0	0	2	0	0	0	0	1	1	5
48	1	0	0	0	0	0	0	0	0	0	1	0	0	1	3
49	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
50	0	2	0	0	0	0	0	0	0	0	0	0	1	0	3
51	0	1	1	1	1	0	0	0	0	0	0	0	0	0	4
52	0	1	0	0	0	0	0	0	1	0	0	1	0	0	3
53	1	0	0	4	0	0	0	0	1	0	0	0	0	0	6
54	1	0	0	1	0	0	0	0	0	0	0	1	0	0	3
55	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
56	1	0	0	1	0	0	0	0	0	0	0	1	1	0	4
57	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2
58	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
60	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
61	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
62	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
63	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
65	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	13	6	4	18	2	2	1	8	2	1	4	7	7	8	83

- 1. Shelikof
- 2. Marmot offshore
- 3. Chiniak offshore
- 4. Barnabas
- 5. Twoheaded
- 10. Alitak Bay
- 12. Kiliuda Bay
- 13. Kupreanof-Viekoda
- 14. Uganik Bay
- 15. Inner Marmot Bay
- 16. Malina-Raspberry
- 18. Southwest offshore
- 19. Marmot-Izhut Bay
- 20. Uyak Bay

Rex sole lengths (cms) from a trawl survey of the Kodiak area, 1995. Appendix G.6

Length	<u> </u>								Ar	ea Gro	up						
(cm)	1	2	3	4	5	6	7	12	13	14	15	16	17	18	19	20	Totals
≥ 25	3	0	0	1	0	0	0	1	0	1,	0	0	0	1	0	2	9
26	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
27	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
28	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
29	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
31	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
33	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	. 1
34	0	0	0	2	1	0	0	1	0	0	0	0	0	0	0	0	4
37	0	1	3	1	0	1	0	0	0	0	0	0	0	0	0	0	6
38	0	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	4
39	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
40	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
41	1	0	2	4	0	0	0	0	1	0	0	0	0	1	0	0	9
42	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
43	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	4
44	0	0	1	2	0	0	0	0	0	0	0	0	0	1	0	0	4
45	0	1	2	3	0	0	0	0	0	0	0	0	0	1	0	0	7
46	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
47	0	0	1	6	0	0	1	0	0	0	0	1	0	2	0	1	12
48	0	0	1	0	1	0	0	0	0	0	0	0	1	3	0	0	6
49	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	3
50	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
51	0	0	3	0	0	0	0	1	0	0	1	0	0	0	0	1	6
52	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	3
53	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
56	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
58	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
59	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	5	2	24	40	2	1	3	4	1	1	2	1	1	12	1	5	105

- 1. Shelikof
- 2. Marmot offshore
- 3. Chiniak offshore
- 4. Barnabas
- 5. Twoheaded
- 6. Alitak flats
- 7. Geese Islands
- 12. Kiliuda Bay
- 13. Kupreanof-Viekoda 17. Ugak Bay

16. Malina-Raspberry

- 14. Uganik Bay
- 15. Inner Marmot Bay
- 18. Southwest offshore

  - 19. Marmot-Izhut Bay 20. Uyak Bay
- Appendix G.7 Yellowfin sole lengths (cms) from a trawl survey of the Kodiak area.

Length							Group					
(cm)	1	5	6	10	11	12	13	14	15	17	20	Totals
≥ 20	0	0	0	1	2	0	7	0	1	0	0	11
21	0	0	0	0	6	0	1	0	0	0	0	7
22	0	0	0	0	4	0	2	0	0	2	0	8
23	0	0	0	0	4	0	4	0	0	2	0	10
24	0	0	0	0	0	0	0	1	0	2	0	3
25	0	0	0	0	0	0	0	0	1	3	0	4
26	0	1	1	0	1	0	3	1	2	11	0	20
27	0	2	0	2	1	0	2	2	7	4	0	20
28	0	0	0	2	4	0	4	2	4	6	0	22
29	0	2	0	4	5	0	4	2	3	11	1	32
30	0	4	0	1	4	0	2	2	6	15	0	34
31	0	2	4	9	11	0	6	1	6	10	0	49
32	0	5	3	7	15	2	11	4	2	4	0	53
33	0	3	1	6	7	2	10	4	5	9	1	48
34	0	8	0	9	22	1	11	2	4	7	0	64
35	0	6	0	2	7	0	3	1	2	1	3	25
36	0	7	1	2	12	1	4	4	0	4	1	36
37	0	8	0	3	4	0	2	0	1	3	0	21
38	0	3	2	1	5	3	2	1	1	1	0	19
39	0	2	0	0	7	1	2	0	1	1	0	14
40	0	1	2	0	3	1	1	0	0	1	0	9
41	0	0	0	0	1	1	0	0	1	0	0	3
42	1	0	0	0	2	0	0	0	0	0	0	3
43	0	0	1	0	0	0	0	0	0	0	0	1
50_	0	0	0	0	0	0	11	0	0	0	0	1
	1 1	54	15	49	127	12	82	27	47	97	6	517

- 1. Shelikof
- 5. Twoheaded
- 6. Alitak flats
- 10. Alitak Bay
- 11. Chiniak Bay
- 12. Kiliuda Bay
- 13. Kupreanof-Viekoda
- 14. Uganik Bay
- 15. Inner Marmot Bay
- 17. Ugak Bay
- 20. Uyak Bay

Appendix G.8 Butter sole lengths (cms) by area from a trawl survey of the Kodiak area, 1995.

Length						Area	Group					
(cm)	1	3	4	5	6	7	10	11	12	17	18	Totals
≥ 20	0	0	6	Ö	0	0	0	0	0	0	5	11
21	0	0	4	0	0	0	0	0	0	0	0	4
22	0	0	3	0	0	0	0	0	0	0	0	3
23	0	0	7	0	0	0	0	0	0	0	0	7
24	0	0	7	0	0	0	0	0	0	1	0	8
25	0	0	9	0	1	0	0	0	0	2	0	12
26	0	0	11	0	0	0	0	0	0	1	0	12
27	0	0	3	0	1	0	0	0	0	2	0	6
28	0	1	6	0	0	0	0	1	0	4	0	12
29	0	4	2	0	0	0	0	3	0	5	0	14
30	0	2	3	0	2	0	0	5	0	3	1	16
31	0	4	7	1	1	0	0	8	0	2	1	24
32	0	10	2	3	5	0	2	7	0	4	2	35
33	0	8	3	2	4	0	0	9	0	6	3	35
34	0	6	0	4	3	0	0	14	1	5	4	37
35	1	6	2	2	6	0	0	2	1	10	3	33
36	0	4	4	5	1	1	0	3	0	6	9	33
37	0	3	0	6	4	0	0	2	0	5	11	31
38	0	2	0	3	1	0	0	0	2	6	9	23
39	0	0	0	4	2	0	0	1	1	3	3	14
40	0	0	0	3	1	1	1	1	0	3	2	12
41	0	0	1	1	0	0	0	0	0	3	1	6
42	0	0	0	5	0	1	0	0	0	2	0	8
43	0	0	0	1	0	0	0	0	0	0	0	1
44	0	0	0	2	0	1	0	0	0	2	0	5
45	0	0	0	0	0	0	0	0	0	1	0	1
48	0	0	0	1	0_	0	0	0	0	0	0	1
	1	50	80	43	32	4	3	56	5	76	54	404

- 1. Shelikof
- 5. Twoheaded
- 10. Alitak Bay 11. Chiniak Bay
- 17. Ugak Bay

- 4. Barnabas
- 3. Chiniak offshore 6. Alitak flats 7. Geese Islands
- 12. Kiliuda Bay
- 18. Southwest offshore

Sablefish lengths (cms) by area from a trawl survey of the Kodiak area, 1995. Appendix G.9

							Area	Group						
(cm)	2	3	4	5	6	10	11	12	13	15	17	18	20	Totals
<35	0	0	0	0	0	0	1	0	2	1	1	0	0	5
36	0	0	0	0	0	0	0	0	1	0	0	0	0	1
39	0	0	0	0	0	0	0	0	1	0	0	0	0	1 -
45	0	0	0	0	1	1	0	0	0	0	0	0	0	2
46	0	0	0	2	0	0	0	0	0	0	0	0	0	2
47	0	0	1	0	0	0	0	0	1	1	0	0	0	3
48	0	0	0	2	0	0	0	2	0	0	0	0	1	5
49	0	0	2	0	0	0	0	0	0	0	0	0	0	2
51	0	0	2	0	0	1	0	0	0	0	0	0	0	3
52	0	0	0	0	0	2	0	0	0	0	0	0	0	2
53	0	0	0	0	0	2	0	0	0	0	0	0	0	2
54	0	0	5	0	0	0	0	0	0	0	0	0	0	5
55	0	0	3	1	0	2	1	0	0	0	0	2	0	9
56	0	0	5	1	0	0	0	0	0	0	0	1	0	7
57	0	0	4	1	0	1	0	0	0	0	0	1	0	7
58	0	0	8	2	0	0	1	0	0	0	0	1	0	12
59	0	0	6	0	0	0	0	0	0	0	0	0	0	6
60	0	0	6	0	0	0	0	0	0	0	0	0	0	6
61	0	1	5	0	0	0	0	0	0	0	0	1	0	7
62	0	0	2	0	0	0	0	0	0	0	0	1	0	3
63	0	0	4	0	0	0	0	0	0	0	0	0	0	4
64	0	0	4	0	0	0	0	0	0	0	0	1	0	5
65	0	0	4	0	0	0	0	0	0	0	0	0	0	4
66	0	0	2	0	0	0	0	0	0	0	0	0	0	2
67	4	0	0	0	0	0	0	0	0	0	0	1	0	5
68	0	0	1	0	0	0	0	0	0	0	0	0	0	1
69	1	0	0	0	0	1	0	0	0	0	0	0	0	2
70	0	1	0	0	0	0	0	0	0	0	0	0	0	1
71	0	0	2	0	0	0	0	0	0	0	0	0	0	2
75	0	0	1	0	0	0	0	0	0	0	0	0	0	1
80	7	2	0 67	9	0	10	3	2	0	2	0	0	0	_2

- 2. Marmot offshore
- 3. Chiniak offshore
- 4. Barnabas
- 5. Twoheaded
- 6. Alitak flats
- 10. Alitak Bay
- 11. Chiniak Bay
- 12. Kiliuda Bay
- 13. Kupreanof-Viekoda
- 15. Inner Marmot Bay
- 17. Ugak Bay
- 18. Southwest offshore20. Uyak Bay

Appendix G.10 Pacific cod lengths (cms) by area from a trawl survey of the Kodiak area, 1995.

Cemp   1	20 Totals 0 10 0 3 0 4 0 3 0 2 0 2 0 2 0 1 0 1 0 1 0 1 0 1
222	0 3 0 4 0 3 0 2 0 2 0 2 0 1 0 1 0 1 0 1
224	0 4 0 3 0 2 0 2 0 2 0 1 0 1 0 1 0 1
24         0         0         0         0         0         0         0         2         0         1         0	0 3 0 2 0 2 0 2 0 2 0 1 0 1 0 1 0 1
288         0	0 2 0 2 0 2 0 1 0 1 0 1 0 1 0 1
228	0 2 0 2 0 1 0 1 0 1 0 1 0 1
229	0 2 0 1 0 1 0 1 0 1 0 1 0 1
30	0 1 0 1 0 1 0 1 0 1 0 1
34         0         0         0         0         0         1         0	0 1 0 1 0 1 0 1
36         0         0         0         0         1         0	0 1 0 1 0 1
39         0	0 1 0 1
41         0	0 1
43         0	0 0
44       0       0       1       0       0       1       1       0       1       1       0       1       0       1       0       1       0       1       0       1       0	0 3
45         0         0         1         2         0         1         0         1         2         0         0         0         3         0         1         0         0         0         1         1         0         0         0         1         1         0         0         0         0         1         1         0	0 2
46       0       0       1       2       0       1       1       0       1       0       1       0       2       0       1       0       0       0       1       0       0       1       0       0       1       0       0       0       1       1       0       0       0       1       1       0       0       0       0       1       1       0       0       0       0       0       1       1       0	0 8
47         0         0         0         2         0         3         0         1         2         0         0         1         1         0         0         0         1         1         0         0         0         0         1         1         0	0 10
49         0         0         0         4         1         0         0         1         1         0         0         0         0         0         0         0         0         0         1         1         0         0         0         0         0         1         1         0         0         1         0         0         1         0         0         1         0         0         1         0         0         1         0         0         1         1         0         0         1         1         0         0         1         1         0         0         1         1         0	0 12
50         0         0         0         5         0         3         1         4         0         0         1         1         1         0         0         1         0         0         1         0         0         1         0         0         1         1         0	0 9
51         1         0         0         4         0         1         1         0         3         1         2         1         3         0	0 11 1 18
52         0         0         2         11         0         5         1         5         3         0         1         1         3         0         0         2         0         1         2         0         1         2         0         1         2         0         1         2         0         1         2         0         1         2         0         1         2         0         1         2         0         1         2         0         1         2         0         1         2         0         1         2         0         1         2         0         1         2         0         1         2         0         1         2         0         1         2         0         1         2         0         0         3         0         0         4         2         3         1         0         0         4         4         0         3         5         4         2         0         4         4         0         3         5         2         6         8         0         1         2         2         2         2         2         1         1	0 17
54       2       2       0       10       0       4       2       3       1       0       1       0       5       0       0       3       0         55       2       2       2       12       0       0       8       5       6       3       5       4       2       0       4       4       0         56       3       4       1       15       1       1       5       4       4       2       4       10       6       0       0       2       0         57       2       1       3       15       0       0       4       2       3       2       2       6       8       0       1       2       2         58       7       6       2       21       1       5       7       5       4       4       5       7       10       0       0       3       0         59       2       2       2       20       4       4       4       4       0       3       5       2       5       0       1       7       1         60       7       3 <td< td=""><td>0 34</td></td<>	0 34
55         2         2         2         12         0         0         8         5         6         3         5         4         2         0         4         4         0         56         3         4         1         15         1         1         5         4         4         2         4         10         6         0         0         2         0         57         2         1         3         15         0         0         4         2         3         2         2         6         8         0         1         2         2         58         7         6         2         21         1         5         7         5         4         4         5         7         10         0         0         3         0         1         7         1         0         0         3         1         5         10         0         1         7         0         0         1         7         0         0         1         7         0         0         1         7         0         0         1         7         0         0         1         7         0         0 <t< td=""><td>0 32</td></t<>	0 32
56       3       4       1       15       1       1       5       4       4       2       4       10       6       0       0       2       0         57       2       1       3       15       0       0       4       2       3       2       2       6       8       0       1       2       2         58       7       6       2       21       1       5       7       5       4       4       5       7       10       0       0       3       0         59       2       2       2       20       4       4       4       4       0       3       5       2       5       0       1       7       1         60       7       3       4       19       0       7       5       5       3       3       1       5       10       0       1       7       0         61       10       1       3       18       1       2       5       3       6       2       4       9       11       0       3       3       1         62       7       1	1 34
57         2         1         3         15         0         0         4         2         3         2         2         6         8         0         1         2         2           58         7         6         2         21         1         5         7         5         4         4         5         7         10         0         0         3         0           59         2         2         2         20         4         4         4         4         0         3         5         2         5         0         1         7         1           60         7         3         4         19         0         7         5         5         3         3         1         5         10         0         1         7         0           61         10         1         3         18         1         2         5         3         6         2         4         9         11         0         3         3         1           62         7         1         3         20         4         4         3         9         4         4	1 60 2 64
59         2         2         2         20         4         4         4         4         4         0         3         5         2         5         0         1         7         1           60         7         3         4         19         0         7         5         5         3         3         1         5         10         0         1         7         0           61         10         1         3         18         1         2         5         3         6         2         4         9         11         0         3         3         1           62         7         1         3         20         4         4         3         9         4         4         5         1         9         0         1         3         0           63         7         5         2         16         2         4         9         9         6         4         2         8         4         1         2         5         0         0         1         3         0           64         9         5         3         12         2	1 54
60       7       3       4       19       0       7       5       5       3       3       1       5       10       0       1       7       0         61       10       1       3       18       1       2       5       3       6       2       4       9       11       0       3       3       1         62       7       1       3       20       4       4       3       9       4       4       5       1       9       0       1       3       0         63       7       5       2       16       2       4       9       9       6       4       2       8       4       1       2       5       0         64       9       5       3       112       2       0       14       10       4       3       2       5       1       0       3       10       1         65       5       3       0       11       9       6       6       4       4       6       1       7       3       2       6       17       1         66       4       3	3 90
61	1 67
62       7       1       3       20       4       4       3       9       4       4       5       1       9       0       1       3       0         63       7       5       2       16       2       4       9       9       6       4       2       8       4       1       2       5       0         64       9       5       3       12       2       0       14       10       4       3       2       5       1       0       3       10       1         65       5       3       0       11       9       6       6       4       4       6       1       7       3       2       6       17       1         66       4       3       3       10       6       4       4       12       8       6       3       8       5       0       2       6       3         67       6       2       5       10       5       5       6       7       3       4       1       3       4       0       5       8       1         68       10       3	6 86 5 87
64 9 5 3 12 2 0 14 10 4 3 2 5 1 0 3 10 1 65 5 3 0 11 9 6 6 4 4 6 1 7 3 2 6 17 1 66 4 3 3 10 6 4 4 12 8 6 3 8 5 0 2 6 3 6 6 6 7 3 4 1 3 4 0 5 8 1 6 6 7 6 2 5 10 5 5 6 7 3 4 1 3 3 3 0 0 4 0 6 9 11 2 4 5 2 4 5 5 5 6 5 1 4 7 0 2 4 0 6 1 7 1 2 4 5 2 4 5 5 5 6 5 1 4 7 0 2 4 0 1 6 1 7 1 3 4 0 3 4 1 4 7 2 1 2 4 2 0 0 6 0 7 2 1 1 3 7 4 1 1 9 5 2 2 4 3 0 0 2 3	3 81
65	6 92
66     4     3     3     10     6     4     4     12     8     6     3     8     5     0     2     6     3       67     6     2     5     10     5     5     6     7     3     4     1     3     4     0     5     8     1       68     10     3     0     14     8     6     5     7     4     3     3     3     3     0     0     4     0       69     11     2     4     5     2     4     5     5     6     5     1     4     7     0     2     4     0       70     8     4     1     10     8     6     8     13     3     3     2     0     3     0     1     6     1       71     3     4     0     3     4     1     4     7     2     1     2     4     2     0     0     6     0       72     1     1     3     7     4     1     1     9     5     2     2     4     3     0     0     0     2     3	8 92
67 6 2 5 10 5 5 6 7 3 4 1 3 4 0 5 8 1 68 10 3 0 14 8 6 5 7 4 3 3 3 3 0 0 4 0 69 11 2 4 5 2 4 5 5 6 5 1 4 7 0 2 4 0 70 8 4 1 10 8 6 8 13 3 3 2 0 3 0 1 6 1 71 3 4 0 3 4 1 4 7 2 1 2 4 2 0 0 6 0 72 1 1 3 7 4 1 1 9 5 2 2 4 3 0 0 2 3	4 95 4 91
69	4 79
70 8 4 1 10 8 6 8 13 3 3 2 0 3 0 1 6 1 71 3 4 0 3 4 1 4 7 2 1 2 4 2 0 0 6 0 72 1 1 3 7 4 1 1 9 5 2 2 4 3 0 0 2 3	4 77
71 3 4 0 3 4 1 4 7 2 1 2 4 2 0 0 6 0 72 1 1 3 7 4 1 1 9 5 2 2 4 3 0 0 2 3	2 69
72 1 1 3 7 4 1 1 9 5 2 2 4 3 0 0 2 3	3 80 3 46
79 0 1 1 4 0 4 0 5 0 0 4 0 4 0 5 0 5	3 51
73 2 1 1 4 2 1 0 5 0 3 4 2 4 0 0 3 0	0 32
74 1 3 0 4 4 2 1 5 7 2 1 3 2 0 1 3 0 75 2 0 3 3 2 1 0 4 3 2 1 0 1 0 2 5 2	2 41
75 2 0 3 3 2 1 0 4 3 2 1 0 1 0 2 5 2 76 0 2 0 0 1 3 0 6 1 0 1 1 1 0 1 3 0	2 33 0 20
77 1 0 0 5 1 1 0 3 0 4 0 3 2 0 5 3 1	1 30
78 2 0 0 1 3 0 1 2 1 1 0 0 1 0 0 1 0	0 13
79 0 0 0 0 2 1 1 0 1 0 0 0 2 0 0 3 1	0 11
80   1 0 0 1 1 0 0 2 0 2 1 0 1 0 0 0 0 81 0 0 1 1 1 1 1 1 1 0 0 2 0 0 0 1 0 0	0 9
82 0 0 0 0 2 1 0 0 2 1 0 0 0 0 0	0 6
83 0 0 1 0 0 0 1 0 0 0 1 1 0 0 0 1 0	1 6
84 1 0 1 3 4 0 0 2 1 0 0 0 0 0 1 0	0 13
85 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0	0 1
87 0 0 0 0 0 1 0 0 0 0 0 0 0 1 0	0 3
88 0 0 0 0 0 0 0 0 1 0 1 0 0 0 0 0	0 2
89 0 0 0 2 1 0 0 0 1 0 0 0 0 0 0	0 4
90 0 0 0 0 1 0 0 1 0 0 0 0 0 0 2 0 92 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0	0 4
92   0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 94   0 0 0 0 0 0 0 0 0 0 0 0 0 1 0	0 1
98 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0	0 1
103 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 1
118 61 55 314 86 99 118 177 134 76 73 114 133 3 48 138 20	71 183

<sup>1.</sup> Shelikof

<sup>5.</sup> Twoheaded

<sup>11.</sup> Chiniak Bay

<sup>19.</sup> Marmot-Izhut Bay

<sup>2.</sup> Marmot offshore

<sup>3.</sup> Chiniak offshore

<sup>6.</sup> Alitak flats

<sup>12.</sup> Kiliuda Bay

<sup>15.</sup> Inner Marmot Bay 16. Malina-Raspberry

<sup>7.</sup> Geese Islands

<sup>13.</sup> Kupreanof-Viekoda

<sup>17.</sup> Ugak Bay

<sup>20.</sup> Uyak Bay

<sup>4.</sup> Barnabas

<sup>10.</sup> Alitak Bay

<sup>14.</sup> Uganik Bay

<sup>18.</sup> Southwest offshore

Appendix G.11. Pollock lengths (cms) by area from a trawl survey of the Kodiak area, 1995.

Length									А	rea Grou	JD QI								
(cm)	1	2	3	4	5	6	7	10	11	12	13	14	15	16	17	18	19	20	Totals
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
13	0	0	0	0	Q	0	0	0	1	0	0	0	0	0	2	0	0	0	3
14	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	0	0	0	6
15	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	7
16	0	1	0	2	0	0	0	0	5	0	0	0	0	0	0	0	0	0	8
17	0	0	0	3	0	0	1	0	1	0	0	0	0	0	0	0	1	0	6
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0	1	0	1
22	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
25	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
26	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
29	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
32	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	1	0	4
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
34	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	1	0	4
35	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	3
36	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	3
37	0	0	0	0	0	0	0	1	3	0	0	2	0	0	0	0	1	0	7
38	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	1	0	5
39	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
40	1	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	6
41	0	0	0	0	0	0	0	7	0	0	0	1	0	0	0	0	0	0	8
42	1	0	0	0	0	0	0	8	0	0	0	0	0	0	1	0	0	1	11
43	2	0	0	0	0	0	0	10	0	0	1	2	0	0	0	0	1	0	16
44	1	0	0	0	0	0	0	10	0	1	0	1	0	0	0	0	0	0	13
45	3	0	0	0	0	0	0	6	1	1	0	4	0	0	1	0	0	0	16
46	3	2	0	0	0	0	0	6	0	1	0	6	0	1	0	0	0	0	19
47	1	0	0	0	2	0	0	11	0	1	0	3	0	0	0	0	0	0	18
48	2	0	1	0	2	1	0	8	0	0	0	4	0	1	1	0	1	3	24
49	3	1	0	1	1	6	0	18	0	0	1	6	0	0	0	0	1	2	40
50	1 1	3	2	1	3	5	4	17	0	0	0	9	0	3	1	1	1	4	55
51	1 1	5	1	3	1	6	0	15	0	2	2	6	0	1	0	0	2	2	47
52	7	3	1	3	4	13	3	15	0	0	0	7	0	3	1	1	2	5	68
53	5	6	3	3	5	6	1	17	1	1	4	5	0	3	4	1	1	4	70
54 55	10	6	2	2 7	3 7	7	4	11	0	2	3	3	3	0	0	3	1	8	68
55 50	3	4	4			11	1	4	0	1	1	5	0	1	2	0	0	6	57
56 57	3	8 7	2 3	9 6	3 3	7 7	0 1	2 10	1	1	1	0	1	1	3	0	0	1	43
57 58	5	5	5 5	2	2	4	2	7	0	1	4	4	3	1	2	1	1	3	58
59	4	2	0	5	3	5	3			1	2	3	2	1	1	1	2	3	48
60				1		0		4	0	2	0	3	2	0	1	1	1	0	36
61	3	3 2	2 0	3	3 2	2	2 1	4 8	2	0 3	0 1	1 2	1 0	0	2 1	0	0	0	24
62	4	1	1	1	3	1	1	3	0	1				0		0	0	1	29
63	1	Ó	0	5	1	2	0	3	0	0	0	1	0	0	0	2	0	0	19
64	ò	0	0	2	0	3	0	5	0	1	1 0	1	0	0	2 3	0	0	0	16 16
65	0	0	0	1	0	0	0					1		0		0	0	1	16
66	0	0	0	1	2	0	0	1 3	0	1	0	1	0	0	1	0	0	0	5
67	0	0	0	0	0	1	0		0	1 0	2	0	0	0	1	0	0	0	10
68	0	0	0	0	0	0	0	1	0	0	0	1	1	0	3	0	0	0	7
69	1	0	0	0	0	0	0			0	0	1	0	0	0	0	0	0	2
70	0	0	0	0	0	0	0	1	0		0	0	0	0	2	0	0	0	4
70 73	0	0	0	0	0	0	0	3 0	0	0 1	0	0	0	0	2	0	0	0	5
73 76	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	1
70	74	59	27	61	50										1	0	0	0	1
	1 /4	59	21	01	50	87	24	230	27	26	26	86	13	16	42	11	22	45	926

- 1. Shelikof
- 2. Marmot offshore
- 3. Chiniak offshore
- 4. Barnabas
- 5. Twoheaded
- 6. Alitak flats

- 7. Geese Islands
- 10. Alitak Bay
- 11. Chiniak Bay
- 12. Kiliuda Bay
- 13. Kupreanof-Viekoda
- 14. Uganik Bay

- 15. Inner Marmot Bay
- 16. Malina-Raspberry
- 17. Ugak Bay
- 18. Southwest offshore
- 19. Marmot-Izhut Bay
- 20. Uyak Bay

Appendix G.12 Rougheye rockfish lengths (cms) from a trawl survey of the Kodiak area, 1995.

Length		· · · · · · · · · · · · · · · · · · ·	· ·				Area	Group						
(cm)	1	2	4	5	7	10	11	12	13	15	17	18	19	Totals
11	0	0	0	0	0	0	0	0	0	0	0	0	1	1
12	0	0	1	0	0	0	0	0	0	0	0	0	0	1
14	0	0	2	0	0	0	0	0	0	0	0	0	1	3
16	0	0	2	0	0	0	0	0	0	0	0	0	0	2
18	1	0	2	0	1	0	0	0	0	0	0	0	0	4
19	0	0	5	0	0	0	0	0	0	0	0	0	0	5
20	1	0	8	0	0	0	0	1	0	0	0	0	0	10
21	1	0	11	0	1	0	0	0	0	0	0	0	1	14
22	4	0	5	0	1	0	0	0	0	0	0	0	0	10
23	1	0	3	0	1	0	0	0	0	0	0	0	1	6
24	0	0	3	0	1	0	0	0	0	0	0	0	1	5
25	0	0	3	0	3	0	0	0	0	0	0	0	1	7
26	0	0	8	1	1	0	0	0	0	0	0	0	1	11
27	2	0	7	0	0	0	0	0	0	0	0	0	1	10
28	0	0	5	0	0	0	0	0	0	0	2	0	0	7
29	3	0	8	3	2	0	1	1	0	0	1	1	1	21
30	1	0	6	3	1	0	0	1	0	0	0	0	2	14
31	0	0	7	5	0	0	0	2	1	0	0	0	0	15
32	1	1	5	4	0	0	3	1	0	0	0	1	0	16
33	0	0	4	2	0	0	0	0	0	1	0	0	0	7
34	0	0	5	0	3	0	0	0	0	1	0	0	0	9
35	0	0	5	0	0	0	0	0	0	0	0	0	0	5
36	2	1	4	0	2	0	0	0	0	0	0	0	0	9
37	2	0	3	0	2	0	1	0	0	0	0	0	0	8
38	3	0	8	2	1	0	1	0	0	0	1	0	0	16
39	2	0	7	1	0	0	0	0	0	0	0	2	0	12
40	3	0	7	1	1	0	0	0	0	0	0	2	0	14
41	2	0	5	0	1	1	0	0	0	0	0	1	0	10
42	4	1	5	0	2	1	0	0	0	0	0	0	0	13
43	0	0	3	0	2	0	0	0	0	0	0	1	0	6
44	0	0	4	0	1	0	0	0	0	0	0	2	0	7
45	0	1	2	0	2	0	0	0	0	0	0	3	1	9
46	1	0	1	0	2	0	0	0	0	0	0	0	1	5
47	0	0	0	0	0	0	0	0	0	0	0	3	0	3
48	1	0	0	0	0	0	0	0	0	0	0	1	0	2
52	0	0	0	0	0	0	0	0	1	0	0	0	0	1
56	1 1	0	0	0	0	0	0	0	0	0	0	0	0	1
61 70	1	0	0	0	0	0	0	0	0	0	0	0	0	1
78	0	0	0	0	0	0	0	0	0	0	0	1	0	1
	37	4	154	22	31	2	6	6	2	2	4	18	13	301

- 1. Shelikof
- 2. Marmot offshore
- 4. Barnabas
- 5. Twoheaded
- 7. Geese Islands
- 10. Alitak Bay
- 11. Chiniak Bay
- 12. Kiliuda Bay
- 13. Kupreanof-Viekoda
- 15. Inner Marmot Bay
- 17. Ugak Bay
- 18. Southwest offshore

19. Marmot-Izhut Bay

Appendix H. Numbers of Tanner crab per 1.85 km (1 nautical mile) in 1995 in the Chignik Management District with population index by area.

Sta Tow		Females				gal Males		Recruit		ecruit	Total	Total	Total
tion #	Juv	Adult	Total	<70	70-91	92~114	>114		<165	>164	Legal	Male	Crab
IVANOF BAY													
4008     196       4007     197       4000     198       4900     199       400x     200       4915     201       4024     202	11 9 0 0 19 0	1 0 0 0 8 0	12 9 0 0 27 0 4	16 6 1 2 12 1 7	1 0 0 0 4 0	0 0 0 0 2 0	0 0 0 0 10 0	0 0 0 0 11 0	0 0 0 0 2 0	0 0 0 0 0	0 0 0 0 13 0	17 6 1 2 41 1	29 15 1 2 68 1
Pop Est	60450	3832	64283	72813	2848	492	2461	2707	492	0	3199	81813	146096
MITROFANIA													
4035 203 4049 204 4065 205 4064 206 4063 207 4048 208	2 5 0 67 8 18	0 0 0 14 1 3	2 5 0 81 9 21	1 0 0 80 14 27	0 0 0 0 3 9	0 0 0 1 16 4	0 0 0 0 12 3	0 0 0 1 9	0 0 0 0 0	0 0 0 0 1	0 0 0 1 10 2	1 0 0 82 55 <b>4</b> 5	3 5 0 164 64 66
Pop Est	221670	39309	260979	258696	13475	46293	32346	27261	0	2532	29793	380603	641582
CHIGNIK BA	¥												
1265 209 1964 210 1264 211 1271 212 1270 213 1312 214 1278 215 1277 216 1274 217 1256 218 1266 219 1267 220 1272 221 1282 222	2 18 17 50 0 43 0 7 6 7 64 6 7 0	0 0 0 0 2 3 28 44 22 0 0 0	2 18 17 50 2 46 28 51 28 7 64 6 7 0	5 12 30 63 4 37 3 2 17 8 74 10 4 0	0 1 0 0 0 0 0 1 1 0 0 0	0 1 0 0 4 6 4 36 0 1 0 0 4	0 0 0 103 16 16 34 0 2 0 0	0 0 0 0 59 8 3 8 0 5 0 0 5 3	0 0 0 0 0 7 3 3 0 0 0 0 0 2	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 66 11 6 8 0 5 0 0 5	5 14 30 64 4 210 36 29 96 8 83 10 4 19	7 32 47 114 6 256 64 80 124 14 147 16 11 19
Pop Est		93330	207102	200860	3191	34321	1/4103	82002	14320	Ü	90011		000868
UJULIK BAY													
298 223 301 224 302 225 296 226	1 0 0 0	34 0 0 0	35 0 0 0	0 1 0 4	0 0 0 0	0 0 0 2	0 0 0 1	0 0 0	0 0 0 0	0 0 0	0 0 0	0 1 0 7	35 1 0 7
Pop Est	851	28922	29772	2772	0	911	456	0	0	0	0	4139	33912
Total	456542	165594	622136	541142	19515	100618	209445	112050	15020	2532	129603	1000322	1622458

Appendix I. Length frequencies of groundfish captured during the 1995 trawl survey of the Chignik area.

Length (cm)	arrowtooth	halibut	flathead	Dover Sole	rex sole	yellowfin sole	rock sole	butter sole	Alaska plaice	sablefish	Pacific cod	pollock	rougheye rockfish	dusky rockfish	northern rockfish
<10	-	-	16	-	-	-	-	•	-	-	-	-	-	-	-
11	1	-	8	-	-	-	•	-	-	-	-	-	-	-	•
12 13	2	-	15 15	•	•	•	-	•	-	•	•	-	-	•	•
14	3	-	10	-	-		-	-	-	-	-	-			
15	1		5	-	-	-	_	_	-	-	-	-	-	-	-
16	1	-	6	-	-	-	-	-	-	-	-	-	-	-	-
17	3	-	6	-	-	•	-	-	-	-	-	1	-	-	-
18	2	-	13	-	-	-	-	-	-	-	-	-	-	-	-
19	11	-	22	-	-	-	-	-	-	-	-	2	-	-	-
20	7	-	21	-	-	-	-	-	-	-	-	-	-	-	-
21 22	8 5	-	32 26	-	- 1	2 1	-	-	-	-	-	•	1 2	-	•
23	14		24	-	-	3	-	-	-	-	-	-	2		
24	11		29	_	-	4	_	-	1	-	-	-	2	-	
25	1	-	27	-	-	4	-	-	-	-	-	-	6	-	-
26	1	-	26	-	-	•	-	-	-	•	-	-	6	•	•
27	4	-	39	-	-	1	-	-	-	-	1	-	4	-	-
28	14	-	42	-	-	2	-	-	-	-	-	-	3	-	-
29	12	-	42	-	1	16	-	-	-	-	•	-	2	-	•
30 31	14 25	-	44 51	•	1 1	10 12	1 -	1	•	-	-	-	3 3	-	-
31	25	-	57	-	-	14	2	1	-		-	-	2	-	-
33	32	-	54	_	1	10	2	1	_	_	-	-	7	-	
34	37	-	45	-	-	5	1	1	-		-	-	1	-	-
35	32	-	52	-	-	5	-	1	-		-	-	3	1	-
36	25	-	38	-	-	9	2	-	-	-	-	-	4	-	1
37	24	-	33	-	-	5	1	1	-	-	-	1	1	-	-
38	17	•	28	-	-	4	1	-	-	-	•	-	-	-	-
39	11	•	24	-	-	6	-	-	•	•	1	-	1	•	-
40 41	11 5	-	25 22	-	-	7 4	1	1 1	-	-	6	1 -	3	-	-
42	12	-	10			2	-	<u>'</u>	-	-	2	2	-	-	-
43	10		14	-	-	<u>-</u>	-	1	_	1	5	-	1	-	-
44	9		6	-	-	-	-	-	-	1	6	-	-	-	-
45	7	-	1	-	-	-	-	-	1	-	10	2	-	-	
46	9	1	4	-	-	-	-	-	-	-	9	1	-	-	-
47	5	-	2	-	-	-	-	-	-	-	8	4	-	-	-
48	13	1	1	-	-	-	-	-	-	-	3	8	-	-	-
49 50	8	-	1	•	-	-	-	-	-	1	5 3	13 15	-	•	•
50	6 7	2	-	-	_	-	-	-			5 6	15	-	-	-
52	4	-	-	-	-	-	-	-	-	-	9	26	-	-	-
53	5	-		-	-	-	-	-	-		10	16		-	-
54	5	2	1	-	-	•	-	-	-	1	3	8	-	-	-
55	2	1	-	-	-	•	-	-	-	1	6	9	-	-	-
56	3	3	-	-	-	-	-	-	-	•	11	10	-	•	-
57	3	4	-	1	-	-	-	-	•	-	5	6	-	-	-
58 50	2	6	-	-	-	-	-	-	•	-	16	10	-	-	-
59 . 60	2	1 1	-	-	-	-	-	-	-	-	13 9	8 6	-	-	-
61	1	6		-		-		-	-	-	22	•	-	-	-
62	3	1	-	-	-	-	-	-	-	-	11	6	_	-	-
64	-	2	-	-	-	-	-	-	-	-	20	3	-	-	-
65	1	5	-	-	-	-	-	-	-	-	19	2	-	-	-
66	-	3	•	-	-	-	-	-	-	-	26	-	-	-	-
67	-	5	-	-	-	-	-	-	-	-	29	1	-	-	-
68	1	2	-	-	-	-	-	-	-	-	16	1	-	-	-
69 70	1 1	- 5	•	-	-	-	-	•	•	•	21	1	-	-	-
70	4	5 5		-	•	-	-	-	-	-	12 5		-	-	-
	1 7	<u>~</u>					Conti								

Length (cm)	arrowtooth	halibut	flathead	Dover Sole	rex sole	yellowfin sole	rock sole	butter sole	Alaska plaice	sablefish	Pacific cod	pollock	rougheye rockfish	dusky rockfish	northern rockfish
72	-	3	-	-:	-	-	-	-	-	-	13	-	-	-	-
73	1	3	-	-	•	-	-	•	-	•	10	-	•	-	-
74 75	<u> </u>	-	-	-	-	•	-	-	•	-	4 7	-	-	-	•
75 76	1	5 5		-	•	-	-	-	•	-	3	-	_	-	-
70 77	l <u>'</u>	-		-	-		-		-	-	3	-	-	-	
78	١.	5		-		_	-	_	-		4	_	_		
73 74 75 76 77 78 79	١.		-	-	-	-	-	-		-	4	_	-	-	-
80		-	-	-	-	-	-	-	-	-	4	-	-	-	-
81	-	6	-	-	-	-	-	-	-	-	4	-	-	-	-
82	-	1	-	-	-	-	-	-	-	-	2	-	-	•	-
83	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
84	-	1	-	-	-	-	•	•	-	-	1	-	-	-	-
85	-	3	•	-	-	-	-	-	•	-	1	-	=	-	•
86	-	2	-	-	-	-	-	-	-	-	-	-	-	-	•
87	-	2	-	•	-	-	-	-	-	-	-	-	-	-	•
88 89	-	3	-	-	-	-	-	-	•	-	1	-	-	-	-
90		2 5	_	-	•	-	-	-	-	-	-	-	-	-	-
91	]	1	-	-	-		-	-	-	-	1	-	-	-	-
92	-	2		-	-		_	_	-	-	1	-	-	-	_
93	١.	2		-	-	_	_	_	-	_		-	-		_
94	_	3	-	-	-	_	-	-	_	-	-	-	_	-	
95	-	_	-	-	-	-	-	-	_	-	_	-	_	-	-
96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
99	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
100	-	-	•	-	-	-	-	-	-	-	-	-	-	•	-
101	-	2	•	-	-	-	-	-	-	-	-	-	-	-	-
102 103	-	1	•	-	-	-	-	-	-	•	-	-	-	-	-
103	-	1	•	-	-	-	-	-	-	-	-	-	-	•	-
105	[	1	-	-	-	_	_	-	-	_	-	-	-	-	-
106			-		_	-	_	_				-	-		_
107	_	2		_	-	_		-	_	_		-	_		_
108	-	-	-	-	-	-	-	-	-	_	-	-	-		-
109		-	-	-	-	-	-	-	-	•	-	-	-	-	•
110	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	•	· -	-	-	-	-	-	-	-	-	-	-	-
112	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
113	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-
114	-	3	-	-	-	-	-	-	•	-	-	-	-	-	-
115	1 -	-	-	-	-	-	-	-	-	-	•	-	•	-	-
116 117	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
117	1 -	-	-	-	-	-	-	-	-	-	-	-	-	-	-
119	1 .	-	-	-	_	_		-	-	-	-	-		-	-
120	-	_	-	-	-	-	-	-	_	-	-	_	-		-
121	1 -	1	-		-	-	-	-	-	-	-	-	-	_	-
122	-	-	_	-	-	_	-	-	-	-	-	-	-	-	-
123	-	1	-	-	-	-	-	-		-	-	-	_	-	-
124	-	-	-	-	-	-	-	-	-	-	-	-	-	•	-
≥125*		5	-						-						

<sup>\*</sup>Halibut: one each at 125, 127, 135, 140, and 142 cms.

Appendix J. Numbers of Tanner crab per 1.85 km (1 nautical mile) in 1995 in the Eastern Aleutians District with population index by area.

ta Tow tion #	Juv	Females_ Adult	Total	<70	Sublega	al Males 92-114	>114	Recruit	Postrec <165	ruit >164	Total Legal	Total Male	Total Crab
AKUTAN BAY						30 30 -							
AKL 160 AKG 161	1 16	1 5	2 21	0 9	1 4	7 15	45 14	1 0	<b>4</b> 1	0	5 1	58 <b>4</b> 3	60 64
AKA 162	2	0	2	2	1 0	2 0	0	0	0	0	0	5 0	7
AKC 163 AKD 164	0	0	0	1	2	8	43	0	4	0	4	58	58
Pop Est	19077	5696	24773	12521	8294	32136	100690	949	8903	0	9852	163493	188266
BEAVER INL	ET												
BIB 172	6	21	27	9	0	3	4	1	0	0	1	17	44
BID 173 BIG 174	302 404	0 4	302 408	310 274	2 10	0 2	0 <b>4</b>	0 2	0 0	0 0	0 2	312 292	614 700
BIK 175	30	6	36	21	7	4	2	1	0	0	1	35	71
BIN 176 BIU 177	14 3	6 0	20 3	2 0	0	0	0 0	0 0	0	0 0	0 0	2 0	22 3
Pop Est	702659	28666	731325	555915	15770	6531	8478	3688	0	0	3688	590381	1321706
inalaska/ki	ALEKTA BAY												
UND 165	0	0	0	0	0	0	0	1	0	0	1	1	1
UNE 166 UNC 167	1 16	0	1 16	0 15	0 1	1 6	0	1 0	0	0	1 0	2 22	3 39
UNF 168	5	1	6	3	1	2	Ō	0	Ō	Ō	ō	6	12
UNJ 169 UNG 170	2 0	7 0	9 0	0	0 1	2	2 0	0	0	0	0	4 1	13 1
KAA 171	0	Ö	0	ő	ō	ŏ	Ö	ő	ō	ŏ	Ö	ō	ō
Pop Est	23705	7595	31300	17863	3387	10847	1899	1309	0	0	1309	35306	66606
LAKUSHIN BA	ΛΥ												
MKP 188	25	16	41	19	12	11	5	0	0	0	0	47	88
MKN 189 MKB 190	14 17	17 15	31 32	10 5	6 7	9 7	2 15	0 2	0 3	0	0 5	27 38	59 70
MKC 191	43	3	46	32	4	0	0	0	0	0	0	36	82
MKE 192 MKF 193	21 24	14 26	35 50	15 15	3 0	4 5	1 0	0 0	1 0	0 0	1 0	24 20	59 70
MKJ 194	0	0	0	3	0	1	1	0	0	0	0	6	6
MKK 195	0	1	1	3	0	4	20	1	3	0	4	. 31	32
Pop Est	125736	85759	211495	93308	25607	38406	51872	2836	8623	0	11459	220653	432148
SOF BAY													
USF 178 USG 179	0	0	0 0	0 1	0 <b>0</b>	0 0	0	0	0	0	0 0	0 1	0
USG 179 USB 180	13	3	16	12	0	3	5	0	3	0	3	23	39
USA 181	39	1	40	54	15	7	0	0	0	0	0	76	116
USC 182	0	0	0	0	2	0	0	0 .	0	0	0	2	2
Pop Est	33624	3343	36966	42261	10195	6931	4375	0	2625	0	2625	66387	103353

# Appendix J. (page 2 of 2)

Sta Tow tion #	Juv	Females_ Adult	Total	<del></del>	Sublega	al Males <u>*</u> 92-114	>114	Recruit	Postred	cruit >164	Total	Total Male	Total Crab
CION #	buv	Addit	TOLAI		70-91	92-114	>114		<100	>104	Legal	Male	CIAD
AKUN BAY													
ANA 158 AND 159	0 0	0	0 0	0 0	0 <b>0</b>	0 0	0 0	0	0	0 0	0 0	0 0	0
Pop Est	0	0	0	0	0	0	0	0	0	0	0	0	0
PUMICESTON	E BAY												
PUA 186 PUB 187	36 4	4 4	40 8	29 5	6 <b>4</b>	5 4	0 2	0	0	0 0	0	40 15	80 23
Pop Est	10299	3542	13841	9495	3965	3753	1349	0	0	0	0	18562	32403
CAPE IDAK													
IDK 183 IDG 184 IDH 185	0 0 0	0 0 0	0 0 0	0 0 0	1 0 1	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	1 0 1	1 0 1
Pop Est	0	0	0	0	1899	0	0	0	0	0	0	1899	1899
Total	915100	134601	1049701	731363	69117	98605	168662	8783	20151	0	28933	1096681	2146381

Appendix K.1. Arrowtooth lengths (cms) by area from a trawl survey of the Eastern Aleutians area, 1995.

Length			-	Area Group			
(cm)	31	32	33	34	35	38	Totals
≥ 15	3	0	6	2	2	0	1
17	0	0	1	0	0	0	1
18	1	0	1	0	5	0	7
19	2	0	4	4	2	1	13
20	6	0	8	4	3	0	21
21	14	Ō	13	6	2	Ö	35
22	7	Ö	9	6	1	ŏ	23
23	4	Ö	2	6	o O	1	13
24	5	Ö	2	2	2	Ö	11
25	1	Ö	4	4	1	1	11
26	4	0	8	3	6	0	21
27	4	1	3	2	4	1	15
28	6	1	1	6			
					5	1	20
29	3	0	3	3	6	2	17
30	6	0	9	6	8	1	30
31	8	2	6	4	3	0	23
32	7	2	6	8	6	3	32
33	6	2	7	8	2	3	28
34	8	1	6	11	2	2	30
35	3	3	13	5	3	3	30
36	3	2	7	6	4	1	23
37	3	5	0	10	4	1	23
38	5	1	3	6	1	0	16
39	1	3	6	9	4	1	24
40	1	3	3	4	3	1	15
41	2	2	3	3	3	2	15
42	4	0	3	0	1	2	10
43	1	1	1	1	2	1	7
44	1	0	1	1	3	3	9
45	0	2	0	3	1	2	8
46	1	0	2	1	1	0	5
47	1	0	2	1	4	1	9
48	2	1	0	1	1	Ó	5
49	0	2	Ö	2	1	Ö	5
50	Ö	1	Ö	2	1	Ŏ	4
51	3	1	Ö	3	2	Ö	9
52	Ö	0	1	2	3	1	7
53	2	Ö	o O	1	2	ò	5
54	1	2	1	0	5	0	9
55	1	1	1	ő	1	Ö	4
56	Ö	4	1	Ö	4	2	11
57	1	3	1	Ö	3	ō	8
58	1	0	1	0	1		
59	ó	1	Ó	1	5	0 0	3 7
60	1	2	1	Ó	5 5		,
61	1	0			5 ^	0	9
			1	0	0	0	2
62 63	1	1	1	0	2	0	5
63	0	0	0	0	1	0	1
64	0	1	0	0	0	0	1
65	0	1	0	1	3	0	5 4 2 2 1
66	0	1	1	1	1	0	4
67	0	0	1	1	0	0	2
68	1	0	0	1	0	0	2
69	0	0	0	0	1	0	1
70	0	0	0	0	1	0	1
71	0	0	1	0	0	0	1
77	0	11	0	0	0	0	1
	136	54	155	151	137	37	670

<sup>31</sup> Akutan/Akun 33. Unalaska/Kalekta

<sup>35.</sup> Usof Bay

<sup>32.</sup> Beaver Inlet

<sup>34.</sup> Makushin/Pumistone

<sup>38.</sup> Cape Idak

Appendix K.2. Halibut lengths (cms) by area from a trawl survey of the Eastern Aleutians area, 1995.

Length (cm) 37 39 40 41 42 43 44 45 46 47 48 49	31 2 4 3 1 4 1 3 6 4	32 0 0 0 0 0 0	33 0 0 1 0 1 0	34 0 0 0 0	35 0 0 0 0	38 0 0 1	Totals 2 4 5
39 40 41 42 43 44 45 46 47 48	4 3 1 4 1 3 6 4	0 0 0 0 0	0 1 0 1	0 0 0	0 0 0	0 1	4 5
40 41 42 43 44 45 46 47 48	3 1 4 1 3 6 4	0 0 0 0	1 0 1	0 0	0 0	1	5
41 42 43 44 45 46 47 48	1 4 1 3 6 4	0 0 0 0	0 1	0	0		
42 43 44 45 46 47 48	4 1 3 6 4	0 0 0	1			Λ	
43 44 45 46 47 48	1 3 6 4	0 0		٥			1
44 45 46 47 48	3 6 4	0	0		0	0	5
45 46 47 48	6 4			0	0	0	1
46 47 48	4		0	0	0	0	3
47 48		0	0	0	0	1	7
48		0	1	0	0	0	5
	13	0	2	0	0	0	15
40 I	5	0	1	0	1	0	7
	3	0	1	0	0	1	5
50	6	0	1	0	0	1	8
51	4	0	1	0	0	0	5
52	7	0	3	0	0	1	11
53	4	0	0	0	0	1	5
54	5	0	1	0	0	1	7
55	6	0	1	0	0	1	8
56	5	0	2	0	2	7	16
57	3	3	1	0	0	1	8
58	3	1	2	2	1	0	9
59	1	1	1	0	0	3	6
60	2	2	0	0	1	5	10
61	3	1	3	1	0	7	15
62	2	1	1	0	2	4	10
63	6	1	1	2	1	3	14
64	1	0	0	0	0	5	6
65	3	0	0	1	1	2	7
66	4	0	0	2	0	1	7
67	2 2	0	0	0	1	4	7
68		1	0	0	3	2	8
69	0	1	1	0	0	3	5
70	3	1	0	0	0	6	10
71	0	1	0	0	0	3	4
72	2	0	0	0	0	4	6
73	2	0	0	0	1	2	5

Length			Δ,	ea Gro			
(cm)	31	32	33	34	35	38	Totals
74	0	0	2	0	1	3	6
75	ő	1	1	0	Ö	3	5
76	Ö	Ö	i	1	0	4	6
77	Ö	0	2	Ö	ō	3	5
78	0	0	0	ō	Ō	2	2
79	0	0	1	0	1	3	5
80	1	Ō	1	Ō	Ó	0	2
81	0	0	0	0	1	3	4
82	0	0	0	0	0	6	6
83	0	0	0	2	1	2	5
84	0	0	0	1	2	1	4
85	1	0	2	2	0	0	5
86	0	0	1	0	0	1	2
87	0	1	0	0	0	1	2
88	0	0	0	0	0	2	2
90	0	0	0	0	0	2	2
91	1	0	0	0	0	3	4
92	0	0	1	0	0	1	2
93	0	0	1	0	0	0	1
94	0	0	0	0	0	1	1
95	0	0	0	1	0	0	1
96	0	0	0	0	0	1	1
97	0	2	0	0	0	0	2
98	0	1	0	0	0	0	1
99	0	0	0	0	0	2	2
100	0	0	1	0	0	0	1
101	0	0	2	0	0	0	2
102	0	0	1	0	0	0	1
104	0	0	0	0	0	2	2
106	0	0	0	0	0	1	1
107	0	0	1	0	0	1	2
116 120	0	0	0	0	1	0	1
120	0	0 1	0	0	0	0	1
140	0	0	0	0	0	1	1
151	0	0	0	1	0	0	1 1
	129	20	44	16	21	119	349
	1 129	20		10	۱ ک	119	348

- 31 Akutan/Akun32. Beaver Inlet
- 33. Unalaska/Kalekta
- 34. Makushin/Pumistone
- 35. Usof Bay
- 38. Cape Idak

Appendix K.3. Pollock lengths (cms) by area from a trawl survey of the Eastern Aleutians area, 1995.

Length			Area Group		
(cm)	32	33	34	35	Totals
20	1	0	0	0	1
35	1	0	0	0	1
41	3	0	0	0	3
42	4	0	0	1	5
43	4	0	0	1	5
44	3	0	0	0	3
45	4	1	1	1	7
46	2	4	2	0	8
47	6	1	2	2	11
48	4	1	8	0	13
49	2	6	3	2	13
50	1	7	3	1	12
51	4	11	6	1	22
52	3	3	7	2	15
53	0	2	5	2	9
54	0	1	3	1	5
55	1	3	1	2	7
56	2	3	4	0	9
57	2	2	4	0	8
58	0	1	0	0	1
59	0	1	4	0	5
60	0	1	2	1	4
61	1	1	2	0	4
62	1	0	2	0	3
63	0	1	0	0	1
65	0	0	1	0	1
66	0	0	3	0	3
67	0	0	1	1	2
70	0	0	1	0	1
	49	50	65	18	182

31 Akutan/Akun

33. Unalaska/Kalekta

35. Usof Bay

32. Beaver Inlet

34. Makushin/Pumistone

38. Cape Idak

Appendix K.4. Rock sole lengths (cms) from a trawl survey of the Eastern Aleutians area, 1995.

Length				Area Group			
(cm)	31	32	33	34	35	38	Totals
≥ 20	3	0	1	0	0	5	9
23	1	1	0	0	0	1	3
24	1	0	1	0	0	3	5
25	0	0	1	0	0	3	4
26	4	0	0	0	0	0	4
27	6	0	1	1	0	1	9
28	4	0	0	0	0	1	5
29	10	0	4	0	1	3	18
30	5	0	3	0	0	3	11
31	12	1	4	0	1	3	21
32	8	1	6	0	1	5	21
33	6	0	5	1	1	4	17
34	13	1	5	0	0	4	23
35	3	0	1	0	0	2	6
36	5	0	3	1	0	4	13
37	2	1	3	0	0	4	10
38	0	1	0	1	0	2	4
39	3	1	2	0	0	6	12
40	3	0	0	1	1	4	9
41	0	0	0	0	0	3	3
42	0	0	2	1	0	3	6
43	0	0	0	0	0	1	1
44	0	0	0	Ô	` 1	0	1
45	1	0	0	1	0	3	5
46	0	0	2	0	Ō	Ö	2
	90	7	44	7	6	68	222

Appendix K.5. Rex sole lengths (cms) from a trawl survey of the Eastern Aleutians area, 1995.

Length				Area Group			
(cm)	31	32	33	34	35	38	Totals
≥ 20	4	0	1	1	0	0	6
21	1	0	1	0	0	0	2
22	1	0	1	0	0	0	2
23	0	0	1	0	0	0	1
32	0	0	0	4	0	1	5
33	0	0	0	8	0	0	8
34	1	0	0	1	0	0	2
35	0	0	0	3	1	0	4
36	1	0	1	0	0	1	3
37	1	1	0	2	0	0	4
38	0	0	0	1	0	1	2
39	2	0	2	4	0	0	8
40	1	1	2	4	0	1	9
41	2	0	1	4	0	0	7
42	2	0	0	3	0	0	5
43	1	0	3	3	0	0	7
44	3	0	2	6	0	2	13
45	1	0	4	0	0	0	5
46	0	0	0	1	0	0	1
47	0	0	0	0	0	1	1
48	0	0	2	0	0	1	3
49	0	0	1	0	0	1	2
50	1	0	2	1	0	0	4
51	0	0	3	0	0	0	3
52	0	0	1	1	0	0	2
55	0	0	0	1	0	0	1
	22	2	28	48	1	9	110

31 Akutan/Akun 33. Unalaska/Kalekta

35. Usof Bay

32. Beaver Inlet

34. Makushin/Pumistone

38. Cape Idak

Appendix K.6. Pacific cod lengths (cms) by area from a trawl survey of the Eastern Aleutians area, 1995

Length	Area Group									
(cm)	31	32	33	34	38	Totals				
33	1	0	0	0	35 0	0	1			
34	1	0	0	0	0	0	1			
35	2	0	0	0	0	0	2			
36	3	0	0	0	0	0	3			
37	8	0	0	0	0	0	8			
38	5	0	0	0	0	0	5			
39	5	0	0	0	0	0	5			
40	5	0	2	1	0	0	8			
41	2	0	0	0	0	0	2			
42	5	0	0	1	0	0	6			
43	6	1	0	0	0	0	7			
44	6	0	4	2	0	0	12			
45	9	0	2	0	0	0	11			
46	11	0	4	2	0	0	17			
47	9	1	1	0	1	1	13			
48	11	0	3	0	0	0	14			
49	8	0	3	2	0	Ō	13			
50	6	Ō	4	Ō	Ŏ	Ö	10			
51	11	1	2	2	Ō	1	17			
52	7	1	4	0	Ö	2	14			
53	7	0	3	1	0	2	13			
54	7	1	1	2	0	0	11			
55	2	0	6	1	Ō	1	10			
56	4	1	3	0	2	1	11			
57	1	1	4	2	0	1	9			
58	1	2	3	4	1	1	12			
59	3	2	6	1	0	4	16			
60	3	2	0	4	3	3	15			
61	3	1	4	3	1	4	16			
62	0	4	2	0	2	4	12			
63	0	1	3	1	2	3	10			
64	2	1	2	3	3	2	13			
65	0	4	2	1	1	2	10			
66	0	0	1	3	2	1	7			
67	0	2	3	5	1	2	13			
68	0	6	2	0	1	0	9			
69	0	3	0	2	4	0	9			
70	1	5	2	0	1	0	9			
71	1	0	2	0	1	2	6			
72	0	0	2	3	3	1	9			
73	0	2	2	0	2	0	6			
74	0	2	1	0	0	0	3			
75	0	2	0	0	0	0	3 2			
76	0	3	0	0	2	0	5			
77	0	2	0	0	0	0	2			
78	0	2	1	1	0	0	4			
80	0	0	1	0	1	0	2			
82	0	1	2	2	0	0	2 5 2			
83	0	1	0	1	0	0	2			
85	0	1	0	2	0	0	3			
86	0	0	0	1	0	0	1			
89	0	0	0	1	2	0	3			
91	0	1	0	0	0	0	1			
95	0	0	0	0	0	1	1			
100	0	0	0	0	11	0	1			
	156	57	87	54	37	39	430			

<sup>31</sup> Akutan/Akun 33. Unalaska/Kalekta

<sup>35.</sup> Usof Bay

<sup>32.</sup> Beaver Inlet 34. Makushin/Pumistone

<sup>38.</sup> Cape Idak

Appendix K.7. Flathead sole lengths (cms) from a traw survey of the Eastern Aleutians area, 1995.

Length	Area Group								
(cm)	31	32	33	34_	35	38	Totals		
7	0	0	0	2	0	0	2		
8	2 2	0	0	0	0	0	2		
9	2	0	0	0	0	0	2		
10	1	0	1	0	2	0	4		
11	0	0	0	3	6	0	9		
12	2	0	1	4	7	0	14		
13	12	2	7	5	2	0	28		
14	7	1	14	12	2	0	36		
15	8	3	6	4	1	0	22		
16	4	1	0	6	2	0	13		
17	1	2	0	7	4	0	14		
18	1	4	2	8	4	0	19		
19	2	8	3	8	6	0	27		
20	2	10	4	13	7	0	36		
21	1	6	6	12	4	0	29		
22	1	12	4	19	7	0	43		
23	1	13	6	23	5	0	48		
24	0	9	6	20	7	0	42		
25	1	10	11	18	5	0	45		
26	4	10	11	24	8	0	57		
27	4	7	11	15	3	0	40		
28	8	5	4	16	3	0	36		
29	7	13	9	15	3	0	47		
30	10	6	14	15	2	0	47		
31	3	11	6	8	1	0	29		
32	5	10	7	7	0	0	29		
33	3	15	5	5	0	0	28		
34	2	9	6	3	2	0	22		
35	2	5	2	1	0	0	10		
36	2	5	2	1	0	0	10		
37	0	8	1	2	0	0	11		
38	0	1	0	1	0	0	2		
39	0	5	0	0	0	0	5		
40	0	2	0	2	0	1	5		
41	0	1	0	0	0	2	3		
42	0	1	0	0	0	0	1		
43	0	1	0	1	0	0	2		
44	0	0	0	1	0	0	1		
46	0	0	0	1	0	0	_ 1		
	98	196	149	282	93	3	821		

31. Akutan/Akun

33. Unalaska/Kalekta

35. Usof Bay

32. Beaver Inlet

34. Makushin/Pumistone

38. Cape Idak

Appendix K.8. Lenghts (cms) of English, Dover, yellowfin, and butter sole, rougheye, northern, black, and dusky rockfish, Pacific ocean perch, sablefish, and herring from a trawl survey of the Eastern Aleutians, 1995.

length (cm)	English Sole	Dover Sole	yellowfin sole	Butter sole	sablefish	herring	Atka mackerel	chum salmon	rougheye rockfish	northern rockfish	black rockfish	dusky rockfish	Pacific ocean perch
7	_	-	-	-	-	-	-	-	- 1	-	-	-	-
8 9	-	-	_	-	-	-	-	-	-	-	-	_	-
10	-		_	_	-	-	-	-	••	_	-	_	-
11	_	-	_	_	_	-	_	_	-	-	-	-	-
12	-	_	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	•	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	1	-	-	•	-
17	-	-	-	-	-	-	-	-	1	-	-	•	-
18	-	-	-	-	•	-	-	-	1	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	•		-	_	_	_
21	-	-	-	-	-	-	_	-	-	-	_	-	_
22 23	_	-	_	-	_	_	_	_	1	-	-		_
24	]	-	-	_	_	_	_	_	i	-	-	-	_
25	_	_	_	_	_	-	_	-	1	1	_	-	-
26	_	-	_	-	-	-	-	_	2	1	1	-	-
27	_	-	1	_	-		-	-	3	-	-	-	-
28		-	-	-	-	1	-	-	1	-	-	-	-
29	-	-	1	1	-	2 7	-	-	-	-	-	-	-
30	-	-	1	-	-		-	-	-	-	-	-	-
31	1	-	-	-	-	6	-	-	-	-	-	-	-
32	-	-	-	-	-	2 5	-	-	2	-	-	-	2
33	1	-	1	-	-	5	-	-	3	-	-	-	1
34	-	-	-	1	-	-	-	-	3	-	-	-	3
35	-	-	2 1	-	-	1	-	-	2 5	-	1	-	4
36 37	-	-	-	1	-	-	-	-	-	_	_	_	2
38	-	-	-	1	-	-	-	_	2	_	_	-	-
39	1	-	2	-	_	-	-	_	1	_	_	-	-
40	2	_	-	_	-	_	_	-	1	-	-	-	-
41	-	_	-	-	-	-	-	-	1	-	-	1	-
42	2	1	-	-	-	-	-	-	3	-	-	-	-
43	-	-	-	-	-	-	-	-	2	-	-	-	-
44	-	-	-	-	-	-	-	-	-	-	-	-	-
45	1	-	-	-	-	-	-	•	-	•	-	-	-
46	-	-	-	-	1	-	1	-	-	-	-	•	•
47	-	-	-	-	-	-	-	-	-	-	-	-	•
48	-	1	-	-	-	-	-	-	-	-	-	-	-
49	-	-	-	•	-	-	•	-	-	-	-	-	-
50 51	-	-	-	-	2	-	-	•	-	-	-	-	-
51 52	-	-	•	-	2	_	-	-	-	-	-	-	-
52 53		-	-	-	2	-	_	-	-	-	_	-	-
53 54	1 -	-	-	-	-	_	-	_	_	_	-	-	_
55	-	1	-	-	-	-	-	1	-	-	-	-	
-	8	3	9	4	5	25	1	1	38	2	2	1	12

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